PAPER TRADE JOURNAL

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SIXTY-EIGHTH YEAR

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PAPER

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Container Plants To Increase Production

Johnson Box Co. Announces Consolidation With Inland Container Corp. —New Branch Plant of Gaylord Container Corp. At Milwaukee Nears Completion—Thilmany Co. Cooperates With Municipality—Other News.

[FROM OUR REGULAR CORRESPONDENT]

APPLETON, Wis., January 16, 1939.—Container production in plants at Milwaukee, Wis., will be stepped up this year, according to important developments now in progress.

E. F. Johnson, president of the Johnson Box Company, manufacturers of corrugated containers, announced last week the merger of his company with the Inland Container Corporation, with main offices at Indianapolis, Ind. The plant will hereafter be known as the Johnson Box Division of the Inland Container Corporation.

Mr. Johnson has been identified with the fiber shipping container industry for 27 years and organized his company in 1933. The company recently occupied the plant of the former Federal Pressed Steel Corporation, and is equipped to expand production. The merger places at its disposal one of the best laboratories in the industry and a wider range of products. The Johnson plant now has 110 employees, and H. C. Krannert, president of Inland, announces it is his plan further to develop the facilities of the Johnson division. Mr. Johnson will continue in complete charge of operations, and no other changes in personnel are contemplated for the present.

New Gaylord Plant Nears Completion

Gaylord Container Corporation, with main offices in St. Louis, is pushing to completion its new branch plant occupying two floors of the former Eline Candy company plant on Port Washington Road, Milwaukee. Renovations are about completed, and the machinery is being installed. It is expected that operations will be started within about a week.

David R. Lepper has been appointed as general manager of the Milwaukee branch. He formerly was general manager of the Manufacturers' Box Company, Milwaukee, manufacturers of shoe boxes, and is succeeded in that position by A. P. Galdabini. J. C. Fourmy, in charge of Gaylord sales in Wisconsin for a number of years, will be sales manager of the Milwaukee plant.

The Gaylord company produces corrugated and solid fiber boxes of all types, and expects to employ 30 to 40 persons at the start of operations.

Arthur Ratcliff, long prominent in the container industry, has been named president of Hummel and Downing Company, Milwaukee, to succeed the late John L. Barchard. Mr. Ratcliff has been associated with the company as vice-president in charge of manufacturing since 1922.

Morris Sayre of New York, vice-president of the Corn Products Refining Company, which controls Hummel and Downing Company, has been named chairman of the board. Clifford E. Board is vice-president and treasurer, and George J. Christiansen is secretary. In addition to the officers, James Clemons, plant manager, was reelected to the board of directors.

The company recently acquired the machine shop of the National Brake and Electric Company at Milwaukee as a warehouse, thereby making room for greater production facilities at its main plant.

Sales of New Appleton Products

Sales of new products are expected to bring an upturn in production at the Appleton Machine Company, Appleton, Wis., according to Carleton E. Saecker, treasurer. The company has developed a new type of flat screen, the sale of which will be pushed this year. An automatic type of grinder for ground wood, radically different in design, has been perfected and has successfully met production tests. The first of these for commercial use is being built for a New York mill, and will weigh 75,000 pounds.

During the last year the company added calender stacks to its line of products, and is now employing 60 men. Although business has been light during the last year, Mr. Saecker finds his salesmen optimistic, and looks for improvement in the demand for Jordans and beaters.

Thilmany Cooperates with Municipality

With the support of the Thilmany Pulp and Paper Company, the largest power customer, back of it, the City of Kaukauna has made a deal between its municipal utility and the Green Bay and Mississippi Canal Company of Appleton, Wis., trading certain of its water power rights on the Fox River for a more advantageous supply in anticipation of the erection of a new hydro-electric plant.

When the contract for the exchange was before the Kaukauna city council for adoption, H. F. Weck-

(Continued on page 22)

Chicago Trade Reports Business Improved

General Paper Merchants Encouraged By Increased Orders For Many Grades of Paper—Printers Warned of Slow Pay By City — Permanent Paper Exhibit Planned—Employers Advised To Watch Eligibility Status.

[FROM OUR REGULAR CORRESPONDENT]

CHICAGO, Ill., January 16, 1939—The Chicago paper trade experienced some very noticeable improvement during the past week according to reports from all sources. In the sulphite bond industry paper executives found orders increasing more rapidly than for inventory requirements only with the market indicated as fairly well established. Kraft papers also found volume good, the consumer industry continuing to take up the increased production of the various mills. Book papers held in fairly even keel, giving a better account of themselves than last week, while the cover market also continued to show improvement. Groundwoods were strong, exhibiting pleasing underlying tone. Newsprints also showed in a more favorable business light. Wednesday, in Chicago, Economist B. C. Forbes stated his belief that business "would be genuinely better before the sap begins to run" and the general tone here indicates that he may well be right. Board markets were in better shape. The only spot where continued weakness was apparent was in the waste paper industry where an oversupply is forcing the market into a "soft" position according to reports.

Printers Extend Credit Warning

A warning not to quote printing prices to the city of Chicago without adding "substantial financial carrying charges for the use of money tied up in long-term accounts receivable" has been sent to all members by the Chicago Graphic Arts Federation representing the 300 larger printing firms of Chicago.

The notice, which received widespread publicity locally, is, of course, of more than ordinary interest to the paper industry and the Chicago paper market. S. F. Beatty, secretary of the Federation, is quoted as saying that "the city owes our members more than $300,000 in unpaid bills, running as far back as three years. Some are refusing to bid on new work so we feel we should warn inexperienced members of the situation. We realize the city is in financial straits, but so are the printers. The unfortunate system penalizes the smaller firms, all in fact that cannot finance themselves. There is no reason to sue and obtain judgments. One cannot sell a judgment except at a discount and one cannot borrow at any bank on a city judgment. Prior to October 1 the city was paying its creditors at the rate of 10 per cent of the vouchered balance of their bills every 60 days. This system would pay out in about four years. But since October 1 none of our members have been paid anything on old or new accounts. We do not seek publicity. The bulletin was intended for the confidential information of our members, to let them know what they are up against."

New Lines Added By Paper Merchants

The Wausau Paper Mills introduced Wausau Mimeo Bond into the Chicago paper market during the past month, selecting two well known local distributors as the outlets in this city. The two are the Messinger Paper Company and the Moser Paper Company.

The J. W. Butler Paper Company had added Linton's Whitag to its line. The new product is described as of white extra strong document and tag stock". The new price sheets also list an addition of green-white color to the Beckett Offset line.

Employers Warned on Eligibility Status

The Illinois paper industry has been asked by Martin Durkin, director of labor, to closely watch its eligibility status under the unemployment compensation insurance act. The paper industry was one of those which indicated increased employment during the past few months, greater than seasonal in a number of instances. "The addition of workers during recent months," warned Mr. Durkin, "will probably makes some employers liable for contributions who were not previously liable." The Illinois director of labor warned that employers should check this situation, report their workers if moved into the eight or more class and remove any possibility of penalty for violation of the law as well as loss of Federal credit.

Plan Permanent Paper Exhibit

The desire of the paper industry to have a permanent location suitable for displaying the products of the industry and the processes whereby paper is made, seems to have received further stimulus within the past few weeks with the announcement that the paper industries exhibits at the Museum of Science and Industry, located in Jackson Park, Chicago, may possibly be contained within the general graphic arts exhibit. The graphic arts exhibit committee is headed by T. E. Donnelly, head of R. R. Donnelley & Sons Company, while the paper industry is formally represented in plans for and participation in the exhibit by W. N. Gillett, president of the Chicago Paper Company and a former president of the National Paper Trade Association. Since the paper industry locally noted the interest created by paper exhibits at the World's Fair, it has always been hoped that a permanent display might be located in this territory to stimulate interest in paper.

Western Merchants Association Moves

The Western Paper Merchants Association has moved its offices from 20 North Wacker Drive to a new location at 120 South LaSalle Street in the heart of Chicago's financial district. The Association changed executive heads along with its location with George E. Howell becoming executive secretary to succeed Norman Ventries who acted in the executive capacity for a two year period. R. S. Bull of Bradner Smith & Company is president of the Association.

The Best Rolls Make the Most Paper At the Lowest Cost Per Ton

$$\frac{\text{Roll Cost + Maintenance}}{\text{Tons Paper Made}} = \text{Roll Cost Per Ton}$$

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Stowe-Woodward Rolls are made on the West Coast by HUNTINGTON RUBBER MILLS, INC., *35 West Lander St., Seattle, Washington*

Leading Men to Address Canadian Meeting

Secretary Cadman of Canadian Pulp & Paper Association Announces Notable Speakers Will Address Annual Convention At Montreal January 25-27—Newfoundland Ratifies Bowater's Mills Agreement—Other News.

[FROM OUR REGULAR CORRESPONDENT]

MONTREAL, Que., January 16, 1939.—According to announcements by A. E. Cadman, Secretary-Manager of the Canadian Pulp and Paper Association, some notable speakers will address meetings in connection with the 26th annual convention of the Association, to be held here on January 25, 26, and 27. These include Burt P. Kirkland, principal Forest Economist of the U. S. Forest Service, Washington, D. C., who will speak at the Woodlands Section luncheon on "The Basis of Forest Policy in the United States"; D. C. Everest, president of the American Pulp and Paper Association, New York, who will be the guest speaker at a joint luncheon of the Woodlands and Technical Sections; the Hon. Peter Heenan, Minister of Lands and Forests for Ontario, who will address the members at the annual luncheon of the association proper; and B. K. Sandwell, editor of Toronto Saturday Night, who will address a luncheon of the Technical Section.

Exhibition of Equipment at Windsor Hotel

A comprehensive exhibition of pulp, paper and logging machines is to be held in the Windsor Hotel, arranged by W. J. Barber. As is usual, many papers on technical subjects will be read by authorities on forestry and forest industries. The Woodlands Section will hold its meetings in the Windsor Hotel, and the Technical Section in the Mount Royal Hotel. The general meeting of the association will be held in the Pulp and Paper Research Institute, and the proceedings will terminate with a cabaret dinner in the Mount Royal Hotel on Friday evening, January 27.

Newfoundland Project Ratified

From Newfoundland it is announced that notwithstanding the opposition of the St. John's Board of Trade, ratification has been given by the Commission of Government to the agreement with Bowater's Newfoundland Pulp and Paper Mills, Limited, by which the latter will purchase the Gander limits on the northeast coast of Newfoundland from the Reid-Newfoundland Company, and, in exchange for the right to cut wood for export, will increase the output of its Corner Brook sulphite plant by 30,000 tons annually by December 31, 1941. This is the plant Bowater's acquired from the International Power and Paper Company. A clause inserted in the agreement as a result of the opposition, which favored building a mill on the Gander limits, increased the penalty for non-fulfilment of a minimum annual cut of export of 50,000 cords from 25 cents a cord to $2 per cord. The agreement now has to go to the Governor for enactment. Meanwhile opposition continues, although it is stated public opinion is divided even among the membership of the Board of Trade which officially is protesting the adoption. Incidentally Bowater's Paper Mills it was stated at the recent annual meeting in London, has with the acquisition of the Corner Brook plant become the largest newsprint manufacturers in the world, with a productive capacity of around 800,000 tons per annum.

Germany, Japan and New Brunswick

How developments on the other side of the world affect even a region like New Brusnwick has just been demonstrated in a reply which the Hon. F. W. Pirie, Minister of Lands and Mines for that province, has given to proposals of a group of unemployed at Saint John. These unemployed want the idle mill of the Port Royal Pulp and Paper Company reopened, and in this connection protested against the export of raw pulpwood to Germany, asking that an export tax be imposed which would be used as a bonus for pulp manufacture at the Port Royal mill.

Mr. Pirie told them that the Port Royal mill was closed "because it had saddled the wrong horse." The mill, he stated, had entered into a contract with a Japanese organization for rayon pulp when it might have had a contract from an Italian firm at the same price. The Japanese, he said, had cancelled the contract whereas had the mill taken the Italian offering it was possible it would have been in operation now.

With respect to the export of pulpwood to Germany, he said it is true that, during the past eight or nine months, more than 400,000 cords had been shipped from the province and that with the exception of some 10,000 cords it had all come from private lands. The government, he said, has no power to prevent such exports. The price, he continued, paid at the ship, has been $10 to $10.50 a cord in contrast with $8 to $8.50 paid by the mills when they were in the market to buy. Mr. Pirie continued that it is not generally recognized that, if the Germans could not buy the wood in this province, Quebec and Nova Scotia would be very pleased to sell it to them.

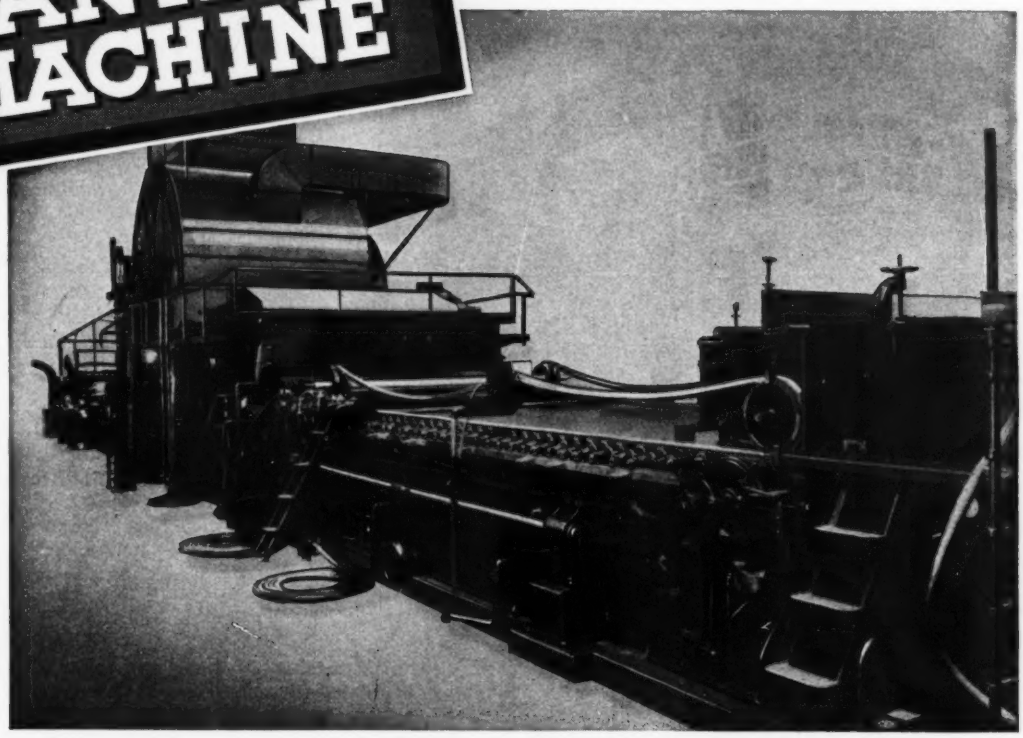
Paper Customs Case Decided

One case in which canary news of 31 pound weight, in 34 inch width rolls, imported from Sweden, was classified for duty, but claimed duty free as standard newsprint, was abandoned by the importer when called for trial in United States Customs Court at New York, according to a report by the Import Committee of the American Paper Industry.

Three cases involving Swedish and Austrian overweight printing paper were abandoned by a New York importer when called for trial in Customs Court at New York, the importer having originally claimed that 41 pound paper was duty free as standard newsprint and not dutiable as held by the Customs officials.

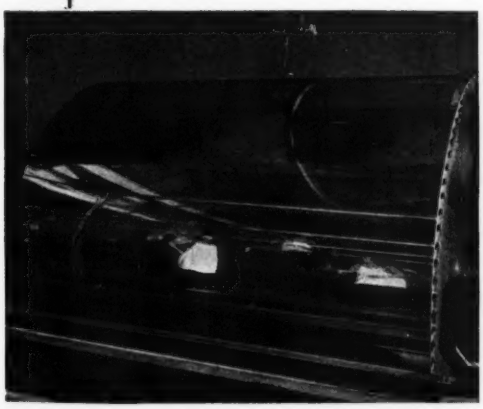
The Bureau of Customs has ruled that cores used in shipping standard newsprint are not dutiable. A question arose as to the classification of such cores, in view of the fact that they are separately charged for by many mills, but the charge refunded when the cores are returned. The Customs officials hold that these cores can properly be considered as necessary packing for the duty free newsprint, and therefore are not dutiable.

THE Beloit YANKEE MACHINE



● The Beloit Yankee Machine furnishes an economical easy means of diversification. No other machine has the all-around adaptability to fit the needs of mills making specialty papers, both light and heavy weights.

The machine is provided with all the latest features: Removable Fourdrinier ...High Speed Super Shake...Suction Rolls...High Pressure Dryer...Hypoid Drive, etc.



Beloit has developed a special alloy metal and special grinding and polishing process to produce the close grained, hard mirror finish shown in this photograph. This is a result of Beloit's many years of experience in building practically all the Yankee machines in this country.

Beloit has also recently developed a high pressure Yankee dryer to meet the demand for maximum production.

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Paper Trade Association Elects Officers

At Annual Meeting of Paper Trade Association of Philadelphia New Members Were Elected To the Board of Governors For Current Year With W. B. Killhour President—Employees Honor Morgan H. Thomas.

[FROM OUR REGULAR CORRESPONDENT]

PHILADELPHIA, Pa., January 16, 1939—At the annual meeting of the Paper Trade Association of Philadelphia, held in the Down Town Club on January 11th, the following members were elected to the Board of Governors for the ensuing year: George W. Weaver, vice-president and general manager, Garrett-Buchanan Company; William A. Hentz, sales manager, The Thomas W. Price Company; LeRoy S. Bishop, treasurer, Raymond & McNutt Company; Ross W. Fishburn, vice-president and general manager, Whiting-Patterson Company; Ormond Freile, vice-president and sales manager, Paper Merchants, Inc.; E. T. Walter, secretary-treasurer, Wilcox-Walter-Furlong Paper Company; T. H. B. Smythe, president, The J. L. N. Smythe Company; Charles Resnick, owner, L. Resnick & Sons; Lewis Gerber, assistant secretary, Enterprise Paper Company; Nathaniel Saxe, owner, Saxe Paper Company; Cecil Bentley, owner, Terminal Paper Company; W. B. Killhour, president, Quaker City Paper Company.

From the new Board of Governors, the following officers were elected: W. B. Killhour, president; William A. Hentz, vice-president—Fine Division; Nathaniel Saxe, vice-president—Wrapping Division; Charles Resnick, vice-president—Bag Division; LeRoy S. Bishop, treasurer, and Cecil Bentley, secretary. Ormond Freile was appointed chairman of the Educational Committee for the year 1939, and Mrs. Doris E. Lewis was reappointed executive secretary.

Garrett-Buchanan Elects Officers

The annual stockholders meeting of Garrett-Buchanan Company, 12-20 South 6th street, was held on January 10th in their offices. The following officers were elected: Morgan H. Thomas, president; George W. Weaver, vice-president and manager; Frank H. Seltzer, vice-president and assistant manager; Elwood Thomas, treasurer; Joseph H. Miller, secretary; John R. Kohl, assistant treasurer; Harvey Van Aken, assistant treasurer; C. Raymond Smith, vice-president in charge of Baltimore and Reading offices and warehouses; J. E. Beale, vice-president, John Heverly, vice-president; John Green, vice-president; Joseph Weaver, vice-president, and A. H. Thomas, vice-president.

Morgan H. Thomas Honored

The employees of the Garrett-Buchanan Company tendered their president, Morgan H. Thomas a party on January 12th at their main office in Philadelphia in honor of his fortieth anniversary with the company. The employees of the Van Reed Paper Company, Reading, Pa., and the Charles W. Beers Company, Baltimore, Md., which companies are under the jurisdiction of Garrett-Buchanan Company, also participated.

Starting as an office boy with a weekly wage of $10, Mr. Thomas was assigned to the duty of making out invoices, the details of which were all made out by hand; he served in many capacities until 1903 when he reached the sales field. It was not long before late president, John H. Sinex recognized the extraordinary ability and determination of young Thomas, and in 1907 he was made vice-president. In 1919, he was made general manager, and under his supervision the company progressed with leaps and bounds and shortly after, buildings at 12, 14 and 16 North 6th street were acquired, which have been occupied continuously together with 18 and 20. On March 25, 1923 the company experienced a disastrous fire, but undaunted by this the company rehabilitated its losses, and was soon doing business at the old stand.

Upon the death of president John H. Sinex in January, 1928, Mr. Thomas was elected president, and under his able administration the Van Reed Paper Company of Reading, Pa., was purchased, followed by the acquisition of the Charles W. Beers Company of Baltimore, Md. To all his employees associated with the company for one year or more Mr. Thomas presented them with a full week's salary at Christmas, 1937 and 1938. Those employed less than one year were likewise remembered in a substantial way.

Employees Show Appreciation by Gift

As a token of their appreciation, the employees presented Mr. Thomas with a moving picture camera —films and a projector—all ready for use. C. Ray Smith, vice-president, made the presentation speech. Mr. Thomas was deeply moved and stated that he was truly at a loss to describe the thrill he experienced, but that it would long be remembered, and as he and Mrs. Thomas plan a trip to Norway and Sweden during the year, they would make good use of the camera. Notably among those present was his good friend, Alexander Thompson, chairman of the board of Champion Paper and Fiber Company, Hamilton, Ohio, who had traveled 695 miles to be with him. Archie Swift, president of Central Penn National Bank was also present.

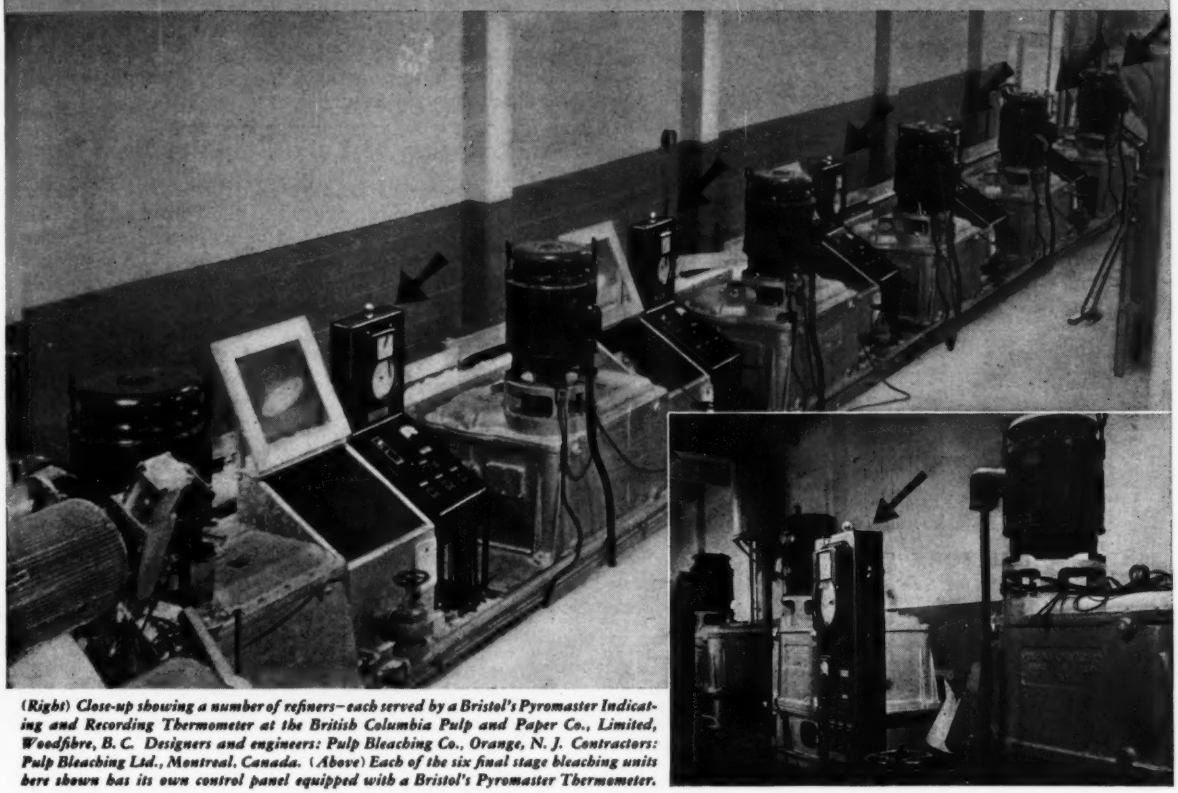
During the dinner which was served at 6:30, music was furnished by a prominent orchestra accompanied by a quartet, followed by dancing.

Canadian Merchants To Meet Jan. 26

TORONTO, Ont., January 16, 1939—The annual meeting of the Canadian Wholesale Paper Dealers' Association will be held in the Windsor hotel, Montreal, on Monday, January 26. This year there will be only a one day session, all the committees holding meetings on the day previous. H. F. E. Kent, of Toronto, is president of the Association and Ivan Moffitt, of Toronto, secretary. The results of the past year will be reviewed and several outstanding speakers heard.

13 BRISTOL'S PYROMASTER ELECTRIC THERMOMETERS

now serving British Columbia Pulp & Paper Co.



(Right) Close-up showing a number of refiners—each served by a Bristol's Pyromaster Indicating and Recording Thermometer at the British Columbia Pulp and Paper Co., Limited, Woodfibre, B. C. Designers and engineers: Pulp Bleaching Co., Orange, N. J. Contractors: Pulp Bleaching Ltd., Montreal, Canada. (Above) Each of the six final stage bleaching units here shown has its own control panel equipped with a Bristol's Pyromaster Thermometer.

. . . for indicating and recording reaction temperatures in Company's new bleaching and refining plant

REFERRED to as one of the industry's most outstanding developments, the new bleaching and refining plant of the British Columbia Pulp and Paper Co. Ltd., at Woodfibre, B. C., is relying on thirteen Bristol's Pyromaster Potentiometer Resistance Thermometers for watching reaction cell temperatures.

For this important service, Bristol's Pyromaster provides extreme sensitivity and responsiveness. No compensation is necessary for temperature variations along the connecting cable. The indicating dial is easy to read,—at a distance or from an angle. The twelve inch round chart has uniform graduations, and also is easy to file. There is no need to disturb the bulb when checking accuracy. For a complete discussion of these and other Pyromaster advantages, write for a copy of Bulletin No. 507J.

THE BRISTOL COMPANY, WATERBURY, CONN.
Branch Offices: Akron, Birmingham, Boston, Chicago, Detroit, Los Angeles, New York, Philadelphia, Pittsburgh, St. Louis, San Francisco. Seattle, Canada: The Bristol Company of Canada, Limited, Toronto, Ontario. England: Bristol's Instrument Company, Limited, London, N.W. 10.

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Financial News of Pulp and Paper Industry

Dexter Pulp and Paper Plant Will Cease Operations January 20—Diversified Rumors Are Circulating On the Future of Lake Sulphite Pulp Company at Red Rock, Ont.—Masonite Corp. Reports Profit of $219,512.

NEW YORK STOCK EXCHANGE

High, Low and Last for the Week Ending January 18, 1939

	High	Low	Last
Armstrong Cork Co.	52⅜	49¼	51¼
Celotex Corp.	17⅞	16⅝	17⅜
Celotex Corp., pf.	70	69	69
Certain-Teed Products Corp.	12⅛	10¾	11⅞
Certain-Teed Products Corp., pf.	45¾	41	43¾
Champion Paper & Fibre Co.	27⅝	26½	26½
Champion Paper & Fibre Co., pf.	101½	100½	100½
Congoleum-Nairn Co.	29	27⅜	28¾
Container Corp. of America	15	14½	15
Continental-Diamond Fibre Co.	9	8¾	9
Crown-Zellerbach Co.	14	12⅞	13⅞
Crown-Zellerbach Co., pf.	89⅛	88¾	89
Flintkote Co.	29⅛	27⅜	29
Robert Gair	3¾	3½	3⅝
Robert Gair, pf.	11⅞	11⅞	11⅞
International Paper & Power	13¾	12⅝	13½
International Paper & Power, pf.	48	44	47½
Johns-Manville Corp.	101	96¼	101
Johns-Manville Corp., pf.	131⅞	131¼	131¾
Kimberly-Clark Corp.	25½	25½	25½
MacAndrews & Forbes	32	32	32
Masonite Corp.	54	50¼	54
Mead Corp.	11	9¾	11
Paraffine Companies, Inc.	59½	58	59
Paraffine Companies, Inc., pf.	102	101½	101½
Ruberoid Co.	29	28⅞	29
Scott Paper Co.	46⅝	46¼	46½
Scott Paper Co., pf.	114½	114½	114½
Sutherland Paper Co.	29⅜	28¼	29⅜
Union Bag & Paper Corp.	12	10¾	10⅞
United Paperboard Co.	6½	6⅛	6⅛
U. S. Gypsum Co.	107	105	106½

NEW YORK CURB EXCHANGE

High, Low and Last for the Week Ending January 18, 1939

	High	Low	Last
Brown Co., pf.	18½	18½	18½
Great Northern Paper	38½	38½	38½
St. Regis Paper Co.	3¼	2⅞	3⅛
St. Regis Paper Co., pf.	56	56	56
Taggart Corp.	5⅛	5	5⅛

Dexter To Shut Down Permanently

[FROM OUR REGULAR CORRESPONDENT]

WATERTOWN, N. Y., January, 17—The Dexter Pulp and Paper mill, organized October 8, 1887, will permanently shut down January 20. About 300 hands, of which about 20 are women, will be thrown out of employment and already arrangements have been made by many of them to apply for unemployment insurance. The closing of the plant terminates the principal industry upon which the citizens and merchants of Dexter are dependent.

It was said last week by President Bernard A. Gray that hope has practically been abandoned of disposing of the business to outside interests. While Canadians have been negotiating for the past three months no definite answer has been received from them and it is believed there is little prospect of the deal being consummated.

Neither has any offer been received from Attorneys Irving Lessen and Richard P. Byrne, Syracuse, in behalf of Mrs. Florence E. Campbell and Mrs. Alice M. Campbell of this city for the $371,000 of outstanding debenture notes held by creditors, although the time for filing the offer is long past due.

The permanent closing of the mills leaves the liquidation of assets to be taken care of, it was said today. One of the first anticipated steps in this direction will undoubtedly be a suit by the federal Reconstruction Finance Corporation to foreclose its first mortgage of $350,000 executed December 4, 1935, on the plant and equipment. This may mean that the government will have to bid in the property, in which case there is a bare possibility it can rejuvenate the mills and arrange for future operation.

Prospects of Lake Sulphite Pulp Co.

TORONTO, Ont., January 17, 1939—Various rumors are in circulation in regard to the future of the Lake Sulphite Pulp Company, Limited, Red Rock, Ont., which has been in liquidation for nearly a year now. One story is that there have been no important developments in the affairs of the company since going into a receivership and that conservation of the assets appears to be the main task of the receivers. It is understood that several engineers have looked over the property on behalf of responsible interests but nothing in the way of an offer to purchase or to reorganize the company has resulted. On the other hand, Hon. Peter Heenan, Minister of Lands and Forests for the province of Ontario, when in Port Arthur last week, stated that renewed efforts are being made toward rehabilitation of the company and that an announcement in connection with its future would be made early next month. Mr. Heenan predicted that an improvement in the newsprint situation in Ontario would be seen throughout 1939.

Scott Co. Calls $250,000 Debenture Bonds

The Scott Paper Company, Chester, Pa., has elected to redeem $250,000 principal amount of its 3¼ per cent convertible debenture bonds at 105 on March 1, 1939. The Company reports that as at the close of business, January 10, there was outstanding only $2,756,000 of the original $4,000,000 principal amount of these bonds, issued March 1, 1937.

Each $1,000 bond is convertible into 25 shares of the Company's common stock. The called bonds are convertible up to February 24, 1939. Uncalled bonds will be convertible up to March 1, 1942.

Masonite Corp. Reports $219,512

The Masonite Corporation reports as follows: Sixteen weeks to December 17: Net profit, $219,512. equal, after 5 per cent preferred dividend requirements, to 35 cents each on 539,210 shares of common stock. Net profit for the sixteen weeks to December 18, 1937, amounted to $339,847, or 58 cents each on 536,740 common shares.

New Water Purification Plant

[FROM OUR REGULAR CORRESPONDENT]

NEENAH, Wis., January 16, 1939.—John N. Bergstrom, president of the Bergstrom Paper Company, announces that work will start within approximately a month on a water purification plant. A temporary frame structure will be erected immediately at a cost of $1,000 to house one of the departments of the mill while the purification plant is being built.

Obituary

Michael Riesner

Michael Riesner, consulting engineer for Worthington Pump and Machinery Corporation, and an outstanding authority in the field of air and gas compression, died suddenly at his home in Buffalo, New York, on December 12.

A member of the Worthington organization since 1892, Mr. Riesner served the corporation as chief engineer of its Cincinnati works for twenty years. In this capacity he was responsible for several outstanding developments, including a complete line of compressors ranging from the very low capacities up to 36,000 cubic feet per minute. He designed and developed many of the special units used today by the United States Government as standard equipment. His work brought him recognition in the Chemical and Compressed Gas industries as an expert designer of compression machinery, especially for compressing gases to very high pressures.

Recently honored by Worthington Pump and Machinery Corporation for long and outstanding service, Mr. Riesner is mourned by all who knew him.

Edmund E. True

Edmund E. True, for many years associated with the Androscoggin Pulp Company of South Windham, Maine, died at his home in South Portland, Maine, on January 3, after a period of illness.

Mr. True was a pioneer pulp board manufacturer, having started in the days of hand made, air dried sheets. He has been known for many years as the grandfather of the board business and the best authority on its manufacture and use.

There was no man in the business with a keener interest and better understanding of human relations than Mr. True. His sympathetic feeling for all men and the faculty he possessed for expressing himself made him beloved and remembered by all with whom he had contact. The host of friends he made on his travels as the sales representative of Androscoggin, from Bangor to Minneapolis and from Montreal to Richmond, will recall his hearty personality and abundant optimism. His philosophy on life he used to sum up to be "agreement on religion with everyone who had any, but on politics only with the Republicans." He lived with the hope that what good he did would continue and that his vices would be buried with him.

Since his retirement in 1925 Mr. True devoted his time to gardening on his beautiful estate on Cape Elizabeth, Maine. He is survived by his wife and a daughter.

Howard F. Everett

[FROM OUR REGULAR CORRESPONDENT]

EAST WALPOLE, Mass., January 9, 1939—Howard F. Everett, 51, foreman of the roofing plant of Bird & Son, Inc., and for a time superintendent of the Canadian branch, died December 31 after a brief illness.

Born in Walpole, he entered the employ of the Bird company when he was 16. He was a candidate for re-election as clerk of the board of selectmen. He served as deacon and clerk of the United Church for several years, and was an active members of the Azare lodge of Masons. He was awarded the Joseph Warren medal by the Massachusetts grand lodge in recognition for faithful service.

He was past master of Walpole grange, a charter member of the Rotary Club; treasurer of Maple Grove Cemetery Association, and a member of Reliance lodge, I. O. O. F., and the Unity Club of East Walpole.

In 1908 he married Earline Emerson Wyman of Walpole. Besides her, he leaves four children, his mother, and two brothers.

The funeral was held at the United Church, January 2.

S. Daniel Stacy

[FROM OUR REGULAR CORRESPONDENT]

KALAMAZOO, Mich., January 14, 1939—S. Daniel Stacy, general superintendent of the American Box Board Company, Grand Rapids, Mich., died Jan. 13, 1939, at the Butterworth Hospital in that city after a week's illness. He was an active member of the Superintendents Association, having served as general chairman of the Michigan Division during the 1937-38 term. He is survived by the widow Bessie, a son Samuel of Grand Rapids, a daughter, Mrs. Vertner Rose of Mt. Pleasant, Mich., and three grandchildren. Burial was a Grand Rapids.

John W. Bolton

[FROM OUR REGULAR CORRESPONDENT]

John Wesson Bolton, founder and president of John W. Bolton and Sons, Inc., Lawrence, Mass., manufacturers of knives and jordan fillings, etc., died January 7 at St. Petersburg, Fla., aged 79 years.

Mr. Bolton's whole life was devoted to the interest of the pulp and paper industry. Since young manhood he had been connected with the manufacture of knives and machinery used in making pulp and paper. His first connection with the industry was with J. H. Horne & Sons, Lawrence, Mass., where he remained for 18 years until 1904 when he started in business for himself, making a specialty of the manufacture of a complete line of high grade knives for use in all of the different machines used in the paper industry.

From a small factory, by his efforts, care and attention to the requirements of the industry, Mr. Bolton built up a large, well-known and naturally used product. In order to broaden the scope of his service to the paper industry, his company in 1927 acquired the Emerson Manufacturing Company, builders of jordan engines and paper mill machinery since 1888. A new factory was erected on the Bolton property. Within a short time, the Dillon Machine Company and the Mills Machine Company, both of Lawrence, Mass., were also acquired. He was active as president until the first of the year.

The business will continue to be conducted by his sons, W. W. Bolton, vice-president, and A. L. Bolton, treasurer, long and intimately associated with their father in this business.

Funeral services were held Wednesday at the family home in North Andover, Mass.

Modernizing Keith Paper Co.

[FROM OUR REGULAR CORRESPONDENT]

TURNERS FALLS, January 16, 1939.—Plans are going forward for the revamping of machinery and production methods of the Keith Paper company recently refinanced through the R. F. C. and local and Boston banks. Paul Hodgdon, who is president and treasurer of the Deerfield Glassine Co., is executive vice president and general manager of the Keith, announced recently that $70,000 is being invested in new high speed machinery and other improvements to meet present-day competition. One of the most important improvements will be air-drying equipment.

The directors elected at a recent meeting are Fred C. Abercrombie, Stanley P. Benton, John S. Begley, Douglas Crocker, Albert R. S. Smith, J. Jefferson Newbold, E. J. Costigan, Paul Hodgdon and Charles N. Stoddard.

A management agreement exists between Keith and Deerfield Glassine in which the latter holds a Keith stock option. Any member of the Monroe Bridge organization is available for use at Turners Falls and may be called upon when needed.

Mr. Hodgdon, in commenting on the situation, recently said: "There is still a demand for the high-grade rag paper that first made Keith famous. The mill will continue to make this paper using the same processes as before. However, to meet competition and to put the mill on a paying basis, we are installing modern methods of production and will manufacture various lines and qualities. The mill cannot be run at 100 per cent normal on the higher grades alone so these other grades are being introduced to take up the slack."

Newsprint Production for December

Production of newsprint in Canada during December 1938 amounted to 209,753 tons and shipments to 225,472 tons, according to the News Print Service Bureau. Production in the United States was 75,855 tons and shipments 77,974 tons, making a total United States and Canadian newsprint production of 285,608 tons and shipments of 303,446 tons. During December, 26,755 tons of newsprint were made in Newfoundland, so that the total North American production for the month amounted to 312,363 tons. Total production in December 1937 was 398,187 tons.

The total North American output of newsprint paper in 1938 was 3,713,039 tons, of which 2,624,580 tons was made in Canada, 820,055 tons in the United States, and 268,404 tons in Newfoundland. The Canadian output was 28.1 per cent less than in 1937, that in the United States 13.3 per cent less, with a loss of 23.3 per cent in Newfoundland, making a total continental decrease of 1,230,624 tons, or 24.9 per cent.

Stocks of newsprint paper at the end of December were 161,438 tons at Canadian mills and 18,583 tons at United States mills, making a combined total of 180,021 tons compared with 197,859 tons on November 30, 1938 and 59,240 tons on December 31, 1937.

Eastwood-Neally Resumes Operations

The Eastwood-Neally Corporation of Belleville, N. J., manufacturer of Eastwood wires, resumed operations at its Belleville plant on Wednesday, January 11, under mutually satisfactory conditions.

CONTAINER PLANTS TO EXPAND

(Continued from page 13)

werth, utility superintendent, quoted a letter from Karl E. Stansbury, president of Thilmany, in which the latter stated approximately 200 employees had been added to the Thilmany payroll through the cooperation of the utility. The new contract, the letter said, would be a "definite encouragement for us to become a greater employer of labor; every effort should be made to make this available as soon as possible."

A public meeting was held several days after the contract was approved by the council, to explain its provisions to the people. It was pointed out that by making 100 per cent of the river flow available, the city can supply power to the Thilmany company cheaper than if it used its own generating facilities.

Charles Seaborne, chief engineer for Thilmany, spoke at the meeting quoting figures to show the company had increased its power purchases from the city, beginning with $71,000 in 1927, and increasing to $142,000 in 1938. He also pointed out that the city would obtain three times as much water power as it was trading in. Myron T. Ray, secretary-treasurer of Thilmany, also voiced a favorable stand on the contract made.

Lower Freight Rates Deferred

Advantages which were to be enjoyed by paper mills through lower freight rates on coal shipments within Wisconsin have again been deferred. The Wisconsin Public Service Commission announces that the rates effective February 1 will not become official until another order is issued. Several individual situations have arisen, the commission stated, which make further study necessary. Oral arguments and briefs are to be presented at a further hearing to be held at Madison, Wis., January 27. Carriers have been instructed to check their mileage so when a new order is issued, the rates can become effective promptly.

Norton Technician Gives Address

Bernard Bornstein, pulp stone technical adviser of the Norton Company, Worcester, Mass., spoke at the monthly meeting last week of the Lake States section of the Technical Association of the Pulp and Paper Industry. The meeting followed a dinner at Conway hotel, Appleton, Wis. Mr. Bornstein presented two colored motion pictures showing operations of the Norton plants.

Gay-Fulcer Nuptials

William W. Gay, chemical engineer of the Kimberly-Clark Corporation, Neenah, Wis., and Miss Jane Ellen Fulcer of Kimberly, Wis., were married January 12 at the Presbyterian church at Kimberly. They will reside at Appleton, Wis.

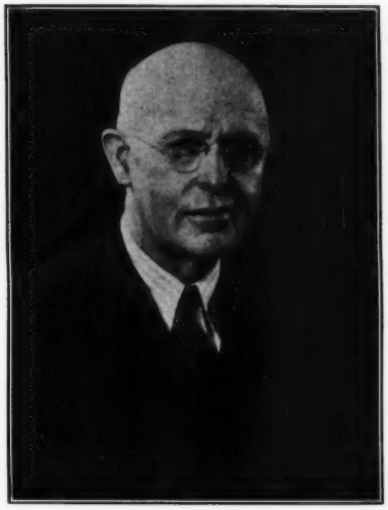
Chemipulp System

A booklet just issued by Chemipulp Process Inc., 500 Woolworth Building, Watertown, N. Y., gives a flow sheet of a typical installation and a complete description of the patented Chemipulp hot acid cooking system. The company states their system offers a unique method of removing CO_2 and other inert gases from the digester relief by venting them from the high pressure drop leg and sending them through the acid system to the atmosphere.

In Bag Business for Fifty Years

Sam Alberding, star salesman of Union Bag and Paper Corporation has completed fifty years of continued service in the paper bag business. During a general sales meeting of the Union Bag and Paper Corporation held at Savannah during the week of December 12, Mr. Alberding was given a testimonial dinner by sixty of the corporation's salesmen and executives from all over the country and presented with a gold watch inscribed, with these words:

"Presented to Sam Alberding at a testimonial dinner in honor of his fifty years of service with the Union Bag and Paper Corporation, Savannah, Georgia, December 15, 1938."



SAM ALBERDING

Behind the speakers' table and enlarged to a size of about five feet was a photograph of Mr. Alberding, looking out to his fellow diners. The menu cards were adorned with his likeness and the cover was done in gold also.

The officers of the corporation were present. Alexander Calder, president, H. S. Daniels, vice president in charge of sales, James H. Allen, vice president and resident director, L. J. Doyle, general sales manager, and B. A. Weathers, Western sales manager were present and congratulated Mr. Alberding. Some of the older salesmen, connected with Mr. Alberding more closely in the Chicago office also made talks.

Mr. Calder made the presentation of the handsome gold watch to the guest of honor, which was the signal for great applause from the diners and great embarrassment on Mr. Alberding's part. It was a big surprise to Mr. Alberding carefully covered up until the dinner.

Twenty years prior to the turn of the last century he was attending school in Batavia, Ill., where his family lived and during summer vacations worked in the bag factory of the Western Paper Bag Company. With this background it was only natural that on leaving school at the age of 15 be became a regular employee of this manufacturer. This was in 1888. His first job was operating a bag machine, and within a year he had become shipping clerk for the factory. He served in this capacity and as assistant bookkeeper until 1893, when the Columbia Exposition was held in Chicago. As a novelty attraction the Western Paper Bag Company built a bag machine at the exposition and sent Sam Alberding to Chicago to supervise the exhibit.

It was in connection with his duties at the exposition and rather by accident that he entered the selling profession which he has followed ever since. The bag machine created considerable interest at the exposition, and paper merchants from various parts of the country inquired of him as to the company he represented. Mr. Alberding seized each of these opportunities to negotiate for a sale, though he was handicapped by the fact that his principals had not told him what the price of the product was. He made a trip back to the plant at Batavia to secure pricing information, and after he returned to the exposition he began to sell bags, and has been doing so ever since.

In 1899 Western Paper Bag Company, along with the Wheeler-Fisher Company, Samuel Cupples Woodenware Company, Chatfield & Woods, D. S. Walton and Hollingsworth & Whitney, and others formed the Union Bag and Paper Company, and as Mr. Alberding was a successful salesman of one of the largest participants in this merger he was given a place with the Wheeler-Fisher organization, who retained their status as agents of the newly formed manufacturer. Since 1899 he has been selling Union products for many years as an employee of Wheeler-Fisher and later of Union Bag and Paper Corporation.

During his long service in the business Mr. Alberding has traveled as far South as New Orleans, West to Denver, and as far North as the Dakotas. When he first sold in the city of Chicago he was his principal's only representative in that market, and in addition covered the entire western territory to the Missouri river. There is scarcely a paper merchant who has done business in the Middle West at any time during the past fifty years who does not know and respect Sam Alberding as one of the deans of the paper bag industry.

American Writing Plans Expansions

[FROM OUR REGULAR CORRESPONDENT]

HOLYOKE, Mass., January 16, 1939.—The American Writing Paper Corporation has a payroll averaging around 1,300 persons and all 14 machines are in operation. This represents a much more promising outlook, according to officials than the early months of 1938 indicated for that year.

The company plans certain expansion during the year, according to a recent statement of Leon M. Yoerg, president and general manager of production.

Three machines at the Parsons division are now being altered so that their flexibility can cover such papers as loft-dried bonds and ledger papers, air dried bonds, index bristols and certain other specialties. Modern cylindrical screens Savealls, and automatic control of drying are some of the perfections in equipment being worked out now.

N. E. Fine Paper Merchants Have Lunch

BOSTON, Mass., January 9, 1939—A luncheon meeting of the Fine Paper Division of the New England Paper Merchants Association was held Thursday at the Boston Chamber of Commerce, with Frederick G. Lockwood presiding in the absence of Chairman John H. Brewer.

PAPER TRADE
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COMING EVENTS IN PAPER INDUSTRY

AMERICAN PAPER AND PULP ASSOCIATION, Sixty-second Annual Convention and meeting, Waldorf-Astoria Hotel, New York. February 20-24.

TECHNICAL ASSOCIATION OF THE PULP AND PAPER INDUSTRY, Convention, Roosevelt Hotel, February 20-23.

SALESMEN'S ASSOCIATION OF THE PAPER INDUSTRY, Annual Meeting and Luncheon, Waldorf-Astoria Hotel, New York, Tuesday, February 21.

NATIONAL PAPER TRADE ASSOCIATION OF THE UNITED STATES, Convention, Waldorf-Astoria Hotel. New York. February 20-22.

NEW ENGLAND SECTION. Technical Association of the Pulp and Paper Industry—Third Friday of each month at the Roger Smith Hotel, Holyoke, Mass.

DELAWARE VALLEY SECTION. Technical Association of the Pulp and Paper Industry—Second Friday of each month at the Engineers Club, Philadelphia, Pa.

LAKE STATES SECTION. Technical Association of the Pulp and Paper Industry—Second Tuesday of each month at the Conway Hotel, Appleton, Wis.

KALAMAZOO VALLEY SECTION. Technical Association of the Pulp and Paper Industry—First Thursday of each month at the Park, American Hotel, Kalamazoo, Mich.

NATIONAL INCOME AND SPENDING

With Congress already revealing an independent attitude and an encouraging desire to sincerely consider national economic problems in a practical manner, business has something to be thankful for. The great need of today in the stimulation of recovery centers in the problem of putting billions of idle dollars and millions of men to work. And the first step that clearly must be taken in the present circumstances is the restoration of confidence. Profiting by the experiences of the past few years, an independent Congress should be able, through modifications of such hampering legislation that now retards the proper conduct of business enterprise, to overcome the current static economic situation and permit all business to operate at a high degree of efficiency.

Unfortunately, the theories of the New Deal cannot be reconciled with the established practices of business. It is obviously impossible to successfully conduct any commercial enterprise without a close adherance to the fundamental principles upon which the industrial eminence of this country has been based — independent management which operates with economy and a high degree of efficiency. Due to the several drastic restrictions imposed on business today by the Administration, taxes are high and national income is low.

The budget submitted to Congress by President Roosevelt this year calls for expenditures of $9,000,000,000 and no business man can derive much confidence from that message. It is a reversal from the sound fiscal policy outlined in Mr. Roosevelt's first budget submitted five years ago when he said in part: "It is by laying a foundation of confidence in the present and faith in the future that the upturn which we have so far seen will become cumulative. The cornerstone of this foundation is the good credit of the Government . . . We should plan to have a definitely balanced budget for the third year of recovery and from that time on seek a continuing reduction of the national debt."

Confidence of business has been steadily declining since that reassuring but unfollowed policy was given and as the national debt and taxes have increased to a now alarming and burdensome degree, confidence is forced to the lowest level in many years. It is doubtful if business can readjust itself to operate at a high rate of capacity under the present restrictions imposed upon it by the current policy of the Roosevelt Administration, and any substantial and permanent recovery apparently must come from a more practical and cooperative Government policy.

Little encouragement is given to business in President Roosevelt's message to Congress this year, which discloses a new theory without any assurance of a balanced budget at any time in the future. The new theory is purely speculative—an out-and-out gamble that, by continuing Government spending prosperity will come through a larger national income which it is hoped may automatically equalize the taxes paid by corporations and citizens, and that the national income may continue to rise to more than offset the expenditures of the Government within a short time.

It is not to be wondered at, that so fantastic a plan to achieve prosperity is apparently favored by few except the Government's own economists. Other leading authorities seem disinclined to accept the spending for prosperity plan and disagree with President Roosevelt's scheme. In general, this new theory is rejected for the reason that the rapid decline in long-term private investment in the last five years has been largely caused by the lack of confidence created by the policy of an administration which views Government deficits as a source of increased buying power. The fallacy of the theory lies in the fact that, the enormously greater buying power for capital as well as consumer goods, is withdrawn by fear of the result of such a prodigious Government spending

policy; that it can reach but a fraction of the twenty or more billions available from private funds under a practical and sound Government fiscal policy.

In a recent address Senator Harry F. Byrd, Democrat from Virginia, pointed out that the actual national debt on July 1, 1939, will approach $50,000,000,000. In advocating a sound policy to end "fiscal insanity" Senator Byrd disagreed with the opinion of Marriner S. Eccles, chairman of the Federal Reserve System who defended Government spending for recovery, and said in part: " 'It is perilous,' says Mr. Eccles, 'to reduce public spending'—and to adopt sound principles of financing after nine years of fiscal insanity. I say it is not only perilous if we do not start soon to approach a balanced budget, but it will be disastrous . . . We have primed the pump with borrowed money for five years. The result has been a tragic failure. Our unemployment today, as just announced by the Government, is over 10,500,000, or 3,000,000 more than a year ago, and not so many less than when the depression began. Mr. Eccles, one of the sponsors of the discredited undivided profits tax, repealed by public demand, believes that government spending should be regulated not by the needs in the functions of Government, but for the purpose of promoting prosperity by spending borrowed money . . . If Federal spending is a prop for prosperity, what will happen when the prop is withdrawn, as some day it must be done, because not even the richest nation in the world can continue indefinitely to violate the basic principles of sound finance?"

William J. Lamory Promoted

William J. Lamory, for the past three years superintendent of the Crocker Division of the American Writing Paper Corporation, Holyoke, Mass., has assumed his duties as assistant to Leon M. Yoerg, president and general manager of production.

Mr. Lamory brings to this position his wide experience in papermaking. He was born in Mittineague, Mass., and early entered the employ of the Southworth Company and the Strathmore Paper Company of that town. His experience has been extensive with the American Writing Paper Corporation having held many supervisory positions in their various divisions for the past fifteen years. In these positions he has covered a wide range of papers both in the fine and coarse grades. His immediate duties will be with the coarse paper divisions.

Government Paper Bids

WASHINGTON, D. C., January 18, 1939—The Government Printing Office has received the following bids for 1,000 sheets of mist gray photo mount board; Mudge Paper Company, $63.49 per M sheets; Mathers-Lamm Paper Company, $65.00, $58.00 and $63.70; R. P. Andrews Paper Company, $58.80; Whitaker Paper Company, $56.70; Barton, Duer & Koch Paper Company, $65.00; Burlock Brothers Company, Inc., $61.50 less 2 per cent; and Old Dominion Paper Company, $66.98.

Production Ratio Report

These statistics are based upon paper production reports to the American Paper and Pulp Association.

COMPARATIVE MONTHLY SUMMARIES

Months	1938(c)	1937(c)	1936	1935	1934
January	63.9%	90.3%	76.1%	65.8%	.....
February	68.7%	90.1%	77.9%	70.0%	.....
March	69.6%	90.3%	76.0%	70.5%	.....
April	68.3%	92.1%	82.3%	70.0%	.....
May	69.0%	90.6%	81.6%	69.4%	.....
June	66.0%	87.3%	80.7%	72.3%	.....
July	72.0%	81.8%	77.3%	64.9%	.....
August	77.2%	82.9%	81.5%	70.9%	.....
September	76.3%	78.6%	80.5%	71.9%	58.2%
October	82.5%	73.5%	87.6%	75.6%	64.7%
November	79.6%	61.9%	88.0%	75.3%	61.7%
December	75.0%	54.5%	85.9%	71.2%	59.6%
Year Average	72.3%	80.6%	81.3%	70.5%	.....

COMPARATIVE WEEKLY SUMMARIES

CURRENT WEEKS, 1938		CORRESPONDING WEEKS, 1937	
*December 3	78.7%	December 4	61.0%
*December 10	77.5%	December 11	56.1%
*December 17	80.9%	December 18	60.0%
*December 24	76.9%	December 25	48.6%
*December 31	63.9%	January 1, 1938	47.0%
*January 7, 1939	66.1%	January 8, 1938	59.2%

The following statistics show the number of mills reporting by ratio groups:

	Number of Mills Reporting, Current Weeks					
Ratio Limits	Dec. 3, 1938	Dec. 10, 1938	Dec. 17, 1938	Dec. 24, 1938	Dec. 31, 1938	Jan. 7 1939
0% to 50%	62	64	63	60	101	65
51% to 100%	247	243	243	231	177	130
Total Mills Reporting	309	307	306	291	278	195

* Subject to revision until all reports are received.
(c) Basic capacity data have been adjusted to correspond with ratings reported by individual companies.

PAPERBOARD OPERATING RATIOS

According to reports from the National Paperboard Association, per cents of operation, based on "Inch-Hours", were as follows:

Mos.	1938 (e)	1937 (e)	1936	1935	Mos.	1938 (e)	1937 (e)	1936	1935
Jan.	55%	80%	61%	61%	July	57%	67%	69%	59%
Feb.	61%	86%	67%	67%	Aug.	66%	74%	75%	65%
Mar.	60%	87%	68%	67%	Sept.	66%	70%	76%	69%
Apr.	57%	89%	70%	61%	Oct.	70%	66%	82%	76%
May	58%	86%	68%	61%	Nov.	64%	56%	79%	70%
June	56%	75%	68%	65%	Dec.	....	46%	74%	60%

Week end. Dec. 3, 1938—61%
Week end. Dec. 10, 1938—64%
Week end. Dec. 17, 1938—65%
Week end. Dec. 24, 1938—69%
Week end. Dec. 31, 1938—35%
Week end. Jan. 7, 1939—45%

(e) Basic figures revised to include new members of the National Paperboard Assn.

Government Watches Paper Market

WASHINGTON, D. C., January 18, 1939—During the Fiscal year ending June 30, 1938, the Purchasing Division of the Government Printing Office placed 8,040 orders amounting to more than $6,000,000 of which paper purchases alone amounted to $5,050,000, according to the annual report of the Public Printer.

He stated that "by closely watching the paper market and the trends therein and by placing orders for standard stocks at the most opportune time as indicated by such trends, an actual saving of $17,975.99 was effected during the year."

The Public Printer stated also that proposals for paper were sent in October 1937 to approximately 150 firms for the 6-month term beginning January 1, 1938, and in April 1938 for the 6-month term beginning July, 1938, which resulted in the placing of 23 contracts for the first 6-month period and 20 contracts for the second 6-month period. Proposals for envelopes for the year beginning July 1, 1938, were issued in April to approximately 50 prospective bidders, resulting in the placing of 7 contracts.

The Research Laboratories of American Cyanamid Company at Stamford, Conn., where a long-range program of research is being carried out to promote progress in industry through chemical developments.

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Section of the
Technical Association of the Pulp and Paper Industry

Edited by Ronald G. Macdonald, Secretary

The Determination of Resistance to Wetting of Paper And Paper Board*

By Philip W. Codwise [1]

Abstract

An investigation has been made of a method proposed for measuring contact angles between aqueous solutions and paper surfaces. The shape of the drop, and the angle of contact, vary according to the degree of size resistance of the surface. By greatly magnifying the drop, and drawing its image, the contact angle is measured.

A number of different paper surfaces of varying degrees of sizing have been tested by this method. The results are interesting and appear to confirm the fact that this is a property possible of accurate measurement directly related to surface wettability.

Introduction

At the 1930 annual meeting, the writer presented a paper upon the above subject *(1)* which described a possible method of determining the degree of resistance of paper surfaces to wetting. Since that time notable contributions have been made to this subject by R. M. Karapetoff Cobb in her papers regarding contact angles. *(2) (3)* The object of the present paper, a contribution of the TAPPI sub-committee on water resistance, is to describe results obtained by an apparatus and method developed by G. H. Lafontaine utilizing the contact angle procedure.

By use of suitable equipment for delivering a small drop to the test surface under standard conditions, allowing this drop to contact the surface for a definite short period of time, and greatly magnifying the image of the contour of the drop in relation to the paper surface, an exact measure may be obtained of the angle of contact of the aqueous solution with the paper surface under standard conditions, or in other words, we have a numerical value for the resistance of this surface to wetting by water solutions. This procedure is already in use to determine suitability of surfaces for ruling and should be of value for determining writing qualities of papers as well as for other wettability problems.

The object of this paper is to demonstrate in a practical way the range and adaptability of the method to a variety of surface water-resistance problems. We selected a number of paper boards in which the face surfaces were known to vary in wettability between large limits and which had been previously graded by the surface spreading method mentioned above as well as by the pen and ink test.

When a drop of aqueous solution is delivered to a sized surface several things may occur. In the first place, as already intimated, the drop takes a definite form, depending upon the wettability, or degree of size resistance, of the surface. In the case of a hard sized paper it holds this form very closely, in the case of a softer sized paper it flattens out materially in a short period of time. This test is based upon the shape taken by the drop at the end of 15 seconds exposure. Other things that are observed, in case the surface is not too hard sized, are a tendency for the surface to darken beneath the drop and a tendency to feather around the edges. Our previously-published method determined the length of time required for the specimen to show the first indication of feathering around the drop (surface spread). For the softer-sized surfaces, this was quite satisfactory but it did not give fine distinctions between the harder sized surfaces. The present method is especially suited to detect differences in hard sized surfaces and to do so in a minimum of time.

Details of Method

The method as detailed by Mr. G. H. Lafontaine of the Howard Smith Paper Mills Limited, is as follows:

EQUIPMENT REQUIRED.

A 1-cc. hypodermic syringe graduated in 0.01 cc. with a No. 27 chrome plated needle. A small burette *(4)* adjusted to deliver drops 1/150 to 1/200 of 1-cc. may be used instead of the hypodermic syringe.

A burette stand to hold the syringe, or burette, in place so that its tip is ¼ inch above the paper surface. A microscope or a projector to enlarge the image of the drop and project it on a glass screen.

PROCEDURE.

A drop of the aqueous solution is placed on the paper strip by means of the syringe or burette, and its image projected on the screen. After 15 seconds the base line of the paper surface and the outline of the

* To be presented at the Annual Meeting of the Technical Association of the Pulp and Paper Industry, Roosevelt Hotel, New York, N. Y., Feb. 20-23, 1939.

[1] Member TAPPI, Chemical Engineer, The Beaver Wood Fibre Company, Ltd., Thorold, Ontario.

drop are drawn on a piece of onion skin paper attached to the back of the glass screen. Tangents are drawn at the points of contacts at right and left of the drop and the outside angles are measured. The average of five drops or ten angles are taken. With a little practice it is not necessary to draw the outline of the drop, as the tangents can be drawn directly from the projected image.

Investigation of Method

As pointed out, we have used this test upon a variety of paper board samples with most interesting results. We are also showing representative figures upon writing papers. The paper board samples are all strictly beater sized or unsized sheets but vary from a very hard sized sheet, sample 1, having an excellent resistance in the surface spread test, and an *angle of contact* of 119.5 degrees, of which a diagram is shown herewith, to a practically slack sized sheet, sample 8, having a surface spread value of only 6 seconds and an *angle of contact* of 31.6 degrees. As an example of a softer sized sheet, we show diagram of sample 5. Fig. 1.

Good writing papers show an angle of contact of approximately 100 degrees and in practice generally vary from 110 to 90 degrees. We are showing results upon a representative writing surface, sample 10. The accompanying table shows the results of this work. It should be noted that the angle with the base of the curve of the drop as actually observed and as used by Mr. Lafontaine, has been designated *angle with base* or "A" whereas "180 degrees A" is shown as the *angle of contact* in order to coincide with the literature upon this subject. Table I.

In carrying out the angle of contact tests, Waterman's south sea blue ink was used. This ink was also used in pen for quality of writing surface. In future work it undoubtedly will be advisable to use U. S. Government standard writing ink as specified in TAPPI Standard T 431 m-35. In the spreading tests water at room temperature was used as is customary.

In connection with the above tables, the readings for the angle of contact determination were all taken after the expiration of a 15 second period. In the case of samples 1 to 2 and 9 to 11, there was very little change in the angle of contact with time. However, in the case of the remaining samples, there was a change with time and in the last two the drop flattened out and was finally absorbed completely. In other words, in the case of the softer sized papers involving absorption into the sheet, the contact angle changes very rapidly with time. It is for this reason

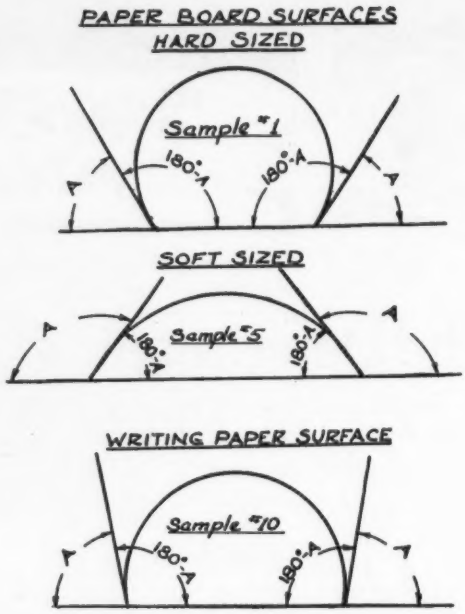

FIG. 1.

that a definite elapsed time for taking the readings should always be observed.

Discussion of Results

These results must be considered in the nature of a preliminary study and are published at this time by the committee because we feel that this method has possibilities, especially with regard to tests for writing quality. Mr. Lafontaine has observed that the finish of the sheet and the nature of the sizing materials has an effect upon the result, as it does upon the writing characteristics. There is no question but that the test shows the general trend of the surface characteristics with regard to wettability. There is not, however, complete agreement in the results as this could scarcely be expected at the present stage of development. There are some indications in these results that the degree of refinement of the stock is a factor to be considered. The largest discrepancies are found in samples 2, 3 and 4 as will be noted. There is a moderate difference in the angle of contact between 2 and 3 and both samples feather slowly when written upon; however, sample 2 is a harder sized sheet and gives a much higher surface spread value. There

TABLE I.—PAPER BOARD SAMPLES

Sample No.	Stock	Finish	Degree of Sizing	Face Surface: Writing Quality	Face Surface: Surface Spreading Test	Face Surface: Angle with Base A	Face Surface: Angle of Contact 180°-A
1	Coarse	Rough	Very Hard	Good	Over 24 hours	60.5°	119.5°
2	Coarse	Rough	Moderately Hard	Feathers Slowly	5 hours	80.1°	99.9°
3	Coarse	Low	Moderate	Feathers Slowly	10 minutes	89.2°	90.8°
4	Fine	High	Moderate	Feathers Slowly	8 minutes	101.4°	78.6°
5	Coarse	Rough	Slight	Spreads Quickly	40 seconds	127.5°	52.5°
6	Coarse	Low	Slight	Spreads Quickly	18 seconds	136.6°	43.4°
7	Coarse	Low	Slack	Spreads Immediately	8 seconds	147.7°	32.3°
8	Fine	High	Slack	Spreads Immediately	6 seconds	148.4°	31.6°

WRITING PAPER SAMPLES

Sample No.	Description	Face Surface: Writing Quality	Face Surface: Surface Spreading Test	Face Surface: Angle with Base A degrees	Face Surface: Angle of Contact 180-A degrees
9	Tub Sized Bond—Light Weight	Good	Over 24 hours	73.5	106.5
10	Tub Sized Bond—Heavy Weight	Good	Over 24 hours	77.5	102.5
11	Beater Sized Ledger	Fair	Over 24 hours	83.0	97.5

is a larger difference in the angle of contact between samples 3 and 4 whereas the surface spread appears to be about the same and they both feather slightly when written upon; it should be noted that the stock on the face of sample 4 is much more refined and the finish higher than in 3. A comparison of samples 2 and 11 are of interest in this connection. They have approximately the same angle of contact but the very much more refined ledger sheet 11 shows a better writing surface and a better spread value.

Miss Cobb who also has developed an apparatus for measuring contact angles has reviewed the procedure described herewith and although agreeing with it in most respects, feels that instead of allowing the drop to fall upon the surface from a height of ¼ inch it would be better to lower the drop before it falls, letting it come to rest gently upon the paper surface. As has already been pointed out the purpose of this report is to awaken interest in this general subject and it will undoubtedly be necessary to carefully standardize any procedure that may be adopted after a detailed investigation.

It has been thought possible that the results of the Cobb Test *(5) (6)* might be utilized as a measure of surface resistance by performing it in a short period of time. With this thought in mind, and to make this survey as complete as possible, values for a 30-second test with the Cobb sizing tester have been obtained upon the above described samples and are as follows:

Sample No.	Cobb Test 30-Second Exposure
1	.0985 gm.
2	.126
3	.132
4	.150
5	.284
6	.302
7	1.79
8	.775
9	.107
10	.120
11	.090

All that can be said regarding the 30-second Cobb test results at the present time is that they show the general trend of the surface sizing; this trend is more clearly marked in samples 1 to 6 than in samples 7 to 11. At present we feel that the contact angle method offers the more promise for numerical expression of surface sizing especially in view of the theoretical considerations involved.

Mention should here be made of work reported by Kovalevsky *(7)* in the measurement of contact angles who did this by placing a paper sample in water and allowing a drop of oil to float up against the sample.

Conclusion

It is possible that any numerical test for writing quality may require a certain amount of interpretation and that direct comparison of results may need to take into account the character of the sheet to a certain extent. However, a numerical method of reporting this feature is very important even if used only for comparing various runs of a similar grade. Therefore, we recommend this angle of contact method for general and more detailed investigation.

Acknowledgment

We wish to express our appreciation of the cooperation of the committee members and especially to Mr. Lafontaine and to Miss Cobb, whose assistance made possible the presentation of this paper at the present time.

Literature Cited

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(4) Carson, F. T. "A Microburette for Testing the Absorptiveness of Thin Paper." *Research Paper R.P. 959.* National Bureau of Standards.

(5) Codwise, P. W. "Water Resistance of Paper." *Tech. Assoc. Papers* XIX: 231-235 (1936).

(6) Egy, W. L. "The Cobb Sizing Tester." *Pulp Paper Canada*, June, 1937.

(7) Kovalevski:—*Pulp Paper Canada*, page 546, October, 1935.

TAPPI Notes

Wanda K. Farr of the Boyce Thompson Institute, Yonkers, N. Y., will discuss "Viscose Rayons" at a meeting of the American Section of the Society of Chemical Industry to be held at the Chemists Club, 52 East 41st Street, New York, N. Y., on Friday, February 10, 1939. Members of TAPPI are invited.

The New England Section of TAPPI will meet at the Roger Smith Hotel, Holyoke, Mass., on Friday, January 20, 1939. Hervey J. Skinner, of Skinner and Sherman, Inc., Boston, Mass., will discuss "The Importance of Water in Papermaking. Franklin P. Lassiter, Research Chemical Engineer of the Dorr Company, New York, N. Y., will talk on "The Colloidal Aspects of White Water Treatment." At the December meeting of the Section, Randall H. Doughty of the Fitchburg Paper Company, was elected chairman.

Lewis B. Miller of Keasby and Mattison, Inc., has succeeded L. M. Booth (deceased) as Chairman of the TAPPI Water Committee.

The annual meeting of TAPPI will be held at the Roosevelt Hotel, New York, N. Y., February 20-23, 1939. The room rates at the Roosevelt are: single 5 to 7, double 7-12. Rates in hotels near the Roosevelt are as follows: Belmont Plaza: s—3 to 5, d—5 to 7; Biltmore: s—6 to 12, d—8 to 14; Commodore: s—4 to 7, d—6 to 10; Tudor: s—2 to 4, d—3.50 to 6; Winthrop: s—3 to 3.50, d—5 to 5:50; Lexington: s—4 to 5, d—5 to 6; Shelton: s—3 to 4.50, d—4.50 to 6; Beaux Arts: s—4 to 6, d—7 to 10. Registration will start on Sunday, February 19, from 1:00 P.M. to 5:00 P.M. on the mezzanine of the Roosevelt.

T. A. Wark Appointed Manager

Thomas A. Wark has been appointed general manager of the new newsprint mill to be erected this year by the Southland Paper Company at Lufkin, Texas. Mr. Wark was formerly general manager of the St. Regis Paper Company at Watertown and recently manager of the Watab Paper Company, Sartell, Minn.

Ground for the new Southland mill has been broken and preliminary work is now in progress.

Visitors From Finland

Eino Saari, Ph.D., professor of Forest Economics at the University of Helsingfors, Finland, and Ahti Mecklin, a director of the Forest Service of Finland, arrived in New York last week. Royal S. Kellogg, secretary of the Newsprint Service Bureau, entertained the visitors at dinner at his home on Wednesday night. The visiting foresters plan to make an extended trip through this country and study forest conditions.

Review Of Paper Industry Literature

Copies of United States Patents can be obtained from the United States Patent Office, Washington, D. C. for 10 cents each. Send currency, not stamps.

Machinery

Agitator. Joseph E. Bond. U. S. pat. 2,087,015 (July 13, 1937).—A stock mixing apparatus comprises a tank and a pump. The tank has a division wall around which the stock circulates from the pump outlet to the pump inlet, and has an inclined baffle wall extending angularly downwards at one side of the division wall; the tank also has a second baffle wall over which the stock flows to the main circulating body of stock and extending downwardly above the first wall at an angle of the order of 45°. The pump inlet is connected to a low point in the tank, and the second-mentioned baffle wall has opening at a distance from the pump outlet but near the bottom of the wall. (Cl. 92-37).—A.P.-C.

Fourdrinier Wire Seam. Ferdinand Steinhart, assignor to The Lindsay Wire Weaving Co. U. S. pat. 2,107,719 (Feb. 8, 1938).—The invention applies to twill weave wires. A number of weft wires are removed from the ends of the fabric to be joined. The loose wire ends are then opened out so that every third warp wire end is bent downwardly and every pair of intervening warp wire ends are bent upwardly. The loose warp wire ends are severed or trimmed short beyond where they cross the last remaining weft wire. The ends of the fabric are abutted with the warp wires of the two sections of fabric in substantially coplanar relationship, and the projecting warp wire ends of one section are united to those of the other section by welding, brazing or soldering in a known manner. The ends of the fabric may be united so that the twill weave is either continuous across the seam or is interrupted at the seam. (Cl. 245-10).—A.P.-C.

Suction Roll. Earl E. Berry, Lloyd Hornhostel and John E. Goodwillie, assignors to Beloit Iron Works. U. S. pat. 2,107,812 (Feb. 8, 1938).—The invention provides means for increasing the efficiency of the mechanism through reduction in the vacuum pump requirements of the roll, combined with means for effecting substantial silencing of the noise occasioned by the operation of the roll. This is accomplished by providing secondary vacuum chambers on opposed sides of the main suction box so that the air in the holes of the shell at the oncoming side of the suction box is partially transferred to the holes at the offgoing side. This creates a partial vacuum in the oncoming holes and partly breaks the vacuum in the offgoing holes. (Cl. 92-53). —A.P.-C.

Cellulose Fibers in Technical Felts. Faserforschung 13, no. 2:99-108 (March 16, 1938); Johannes Bartsch. B. I. P. C. 8:338.—The author gives a general review of technical felts, their most common applications, and requirements for various purposes, the latter differing considerably from the demands of the clothing industry. They are made either from pure sheep wool, or with mixtures of plant and mineral fibrous materials. According to their method of manufacture, they can be divided into woven and pressed felts. The paper industry consumes large quantities of woolen felts in many different weights and widths. They all have to travel at high speeds under tension, taxing their tensile strength and causing a great wear of the rubbing surface. Vegetable fibers, with the exception of cotton drier felts, are not satisfactory under these conditions. The latter, however, are not suited for all kinds of paper and are less resistant to heat and acid than woolen felts. The technical importance of the latter is partly based upon their characteristic response to the fulling treatment and the extraordinary elasticity of the crimped fiber, and partly upon their resistivity to mechanical stresses, such as pull, pressure, impact, bending, and friction, in wet and dry condition, in the cold and in the heat, and during neutral and acid reactions. Artificial fibers, however, cannot be fulled at the present time; it would be quite impossible to manufacture a fulled felt from staple fiber. With regard to additions to sheep wool, the following observations were made. Additions of 20-25% staple fiber do not impair the fulling operation; the dry strength is not affected, but is rather increased; wet strength and elongation, however, decrease decidedly in ratio to higher additions. As long as technical felts are only used under dry conditions, a certain percentage of staple fiber is quite permissible, the amount depending upon individual conditions. If, however, elasticity of the felt surface is of prime importance, or when the felts are used in moist condition, eventually at elevated temperatures and in the presence of chemicals, even small additions of staple fibers developed to date, the author states, are not suitable.—C.J.W.

Paper Making Machine. Henry Street Furminger. U. S. pat. 2,108,116 (Feb. 15, 1938).—A number of Fourdrinier forming sections are combined with a cylinder mold, preferably so arranged that the web formed on the cylinder mold is sandwiched between the webs from the Fourdrinier forming sections and in contact with the wire sides of the latter webs. Alternatively, the cylinder mold may be used without any stock in the vat, merely as a means of transferring the web from one Fourdrinier to a pick-up felt, in which case the resulting composite web is a duplex or a multi-ply Fourdrinier sheet. (Cl. 92-39).—A.P.-C.

Paper Machine Distributing Apparatus. Jerome P. Strasser, assignor to Stein Hall Manufacturing Co. U. S. pat. 2,111,440 (March 31, 1938).—The apparatus consists essentially of a vessel containing the material to be distributed, a drum or roll rotating in the vessel in contact with the material at its lower side, and an adjustable distributing blade adapted to remove excess material from the drum as it rotates and cause the material to flow uniformly and evenly down an inclined path toward the wire of the machine. Fins are positioned within the path to collect and distribute the material, and means are provided for controlling the height and volume of the flow of material collected by the distributing and for controlling and varying the speed of the rotating roll and the angle of inclination of the distributing blade. (Cl. 92-40).—A.P.-C.

Index, Technical Section, Paper Trade Journal, Volume 107, July to December, 1938

Prepared by Clarence J. West, Chairman, Committee on Abstracts and Bibliography, TAPPI

The page numbers in the following index refer to the continuous paging of the *Technical Section* and have no relation to the pagination of the individual numbers of the PAPER TRADE JOURNAL.

References to abstracts of periodical articles published in the *Technical Section* are preceded by the letter "A"; those to patents are indicated by the letter "P". Other entries refer to original articles published in this *Section;* the author entries for such articles are printed in capitals. No author entries are given for the abstracts or patents.

In order to facilitate reference to the individual numbers of the PAPER TRADE JOURNAL, the following table is given, showing the pages of the *Technical Section* appearing in each of the 26 numbers of Volume 107 of the PAPER TRADE JOURNAL, (July to December, 1938):

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Delaware Valley TAPPI Discusses Lithography

About fifty members of the Delaware Valley Section of the Technical Association of the Pulp and Paper Industry met at the Engineers Club, Philadelphia, Pa., Friday evening, January 13, 1939. C. M. Connor of the Valley Forge Laboratories, Conshohocken, Pa., presided as chairman.

Frederic C. Clark, president of TAPPI, was present and commented on a number of the Association's activities and plans.

The speaker of the evening was C. G. Weber of the National Bureau of Standards, Washington, D. C., who discussed "Studies on Paper for Lithographing". Hugo H. Hanson, president of W. C. Hamilton & Sons, Miquon, Pa., presided during the discussion of this paper. Mr. Weber outlined the work done in cooperation with the Lithographic Technical Foundation.

Among the comments made by Mr. Weber and others present were as follows: The hopeful aim of the study has been to get paper to change a minimum in dimension during printing. This is difficult because paper is naturally hygroscopic. To get the best printing effect the paper should have a moisture content about one half per cent above that which is in equilibrium with the humidity in the print shop. Careful air conditioning is necessary.

Mr. Weber cited the care with which paper is stored and handled for use in reproducing the Coast and Geodedic Survey maps on which 24 colors on one side and nine on the other are printed. The paper should be wrapped in moisture resistant paper such as duplex kraft with asphalt binder. Much progress has been made in getting the printers to use the sword hygrometer. This has resulted in using paper of the proper moisture content for printing.

Mechanical action such as beating affects sheet dimensions but not as much as moisture and humidity. Paper received cold tends to condense moisture and have wavy edges. It is diffcult to get rid of waves. Paper is usually made too dry. Printers can correct for deficiencies in one direction of the sheet but not for two.

In addition to curl due to moisture it is possible for paper to have a mechanical deformation produced in manufacture. Paper, to produce good printing results, should have about 7 per cent moisture in summer and 5.5 to 6.0 in winter.

The speaker for the meeting on February 10 will be Robert B. Wolf, manager of the Pulp Division, Weyerhaeuser Timber Company, Longview, Wash., who will talk on "Recent Developments in Sulphite Pulping".

Among those present were: S. M. Cooper, R. M. Bates, E. J. Albert, J. Carl Schmidt, J. B. Atwater, J. D. Davis, R. H. Underdown, Chas. A. Shubert, Fred Streicher, Robert E. Smith, H. M. Wilson, E. E. Helm, E. H. Koontz, H. Hulmes, E. V. Romaine and G. L. Olson, Philadelphia, Pa.; S. G. Briscoe, G. L. Schwartz and Samuel M. Bratton, Wilmington, Del.; R. T. Bingham, J. J. Lafferty, E. I. Stokes, R. G. Macdonald and Alex. McInnes, Jr., New York City; W. P. Richardson, Camden, N. J.; W. E. Brow, Manayunk, Pa.; C. G. Weber, Washington, D. C.; H. H. Hanson, Miquon, Pa.; Frederic C. Clark, Newton, Mass.; James d'A. Clark and F. W. Brainerd, Chester, Pa.; C. G. Albert and George J. Lane, Metuchen, N. J.; Adolf Shnabel, Lansdowne, Pa., and C. M. Connor, Conshohocken, Pa.

Imports of Paper and Paper Stock

Giving Manifests of New York, Boston, Philadelphia and Other Ports of Newsprint, Wrapping, Writing, Coated, Blotting, Tissue, Strawboard, Wallboard, Cigarette Papers, Sulphite, Kraft and Ground Wood Pulp.

NEW YORK IMPORTS

WEEK ENDING JANUARY, 14, 1939
SUMMARY

Cigarette paper	650 cs.
Wall paper	10 bls., 12 cs.
Painted paper	12 bls.
Paper Hangings	39 bls.
Newsprint	3,510 rolls
Printed paper	52 rolls, 152 cs.
Wrapping paper	154 rolls, 166 bls., 88 cs.
Packing paper	97 cs.
Filter paper	2 cs.
Metal covered paper	8 cs.
Basic paper	10 cs.
Decalcomania paper	30 cs.
Decalcomanias	36 cs.
Transfer paper	1 cs.
Tissue paper	111 bbls., 14 cs.
Gummed paper	1 cs.
Imitation parchment paper	8 cs.
Writing paper	13 cs.
Tracing cloth	4 cs.
Paper tubes	184 cs.
Miscellaneous paper	16 rolls, 116 cs.

CIGARETTE PAPER

Champagne Paper Corp., *Paris,* Havre, 635 cs.
Braunstein Freres, Inc., *Paris,* Havre, 15 cs.

WALL PAPER

F. S. Allenby & Co., *Kongo Maru,* Kobe, 1 cs.
——, *Tokai Maru,* Kobe, 9 bls.
American Express Co., *Nagara Maru,* Tientsin, 2 cs.
——, *Hansa,* Hamburg, 9 cs.
F. J. Emmerich, *Hansa,* Hamburg, 1 ble.

PAINTED PAPER

F. J. Emmerich, *Paris, Havre,* 12 lbs.

PAPER HANGINGS

W. H. S. Lloyd & Co., *American Merchant,* London, 39 bls.

NEWSPRINT

Jay Madden Corp., *Tunaholm,* Kotka, 145 rolls.
Lunham & Reeve, Inc., *Tunaholm,* Kotka, 299 rolls.
Wilkinson Bros., & Co., Inc., *Tunaholm,* Kotka, 71 rolls.
Boston Paper Board Co., *Tunaholm,* Gothenburg, 137 rolls.
Jay Madden Corp., *Mormacsun,* Kotka, 1351 rolls.
Jay Madden Corp., *Scanyork,* Kotka, 1018 rolls.
Perkins Goodwin & Co., *Hansa,* Hamburg, 163 rolls.
Jay Madden Corp., *Hansa,* Finland, 326 rolls.

PRINTING PAPER

H. Reeve Angel & Co., Inc., *Mormacsun,* Kotka, 39 rolls.
Dingelstedt & Co., *Hansa,* Hamburg, 152 cs., 13 rolls.

WRAPPING PAPER

——, *Tunaholm,* Gothenburg, 154 rolls, 166 bls.
C. S. Allen Corp., *Ascania,* Southampton, 8 cs.
Steiner Paper Corp., *Hansa,* Hamburg, 80 cs.

PACKING PAPER

A. M. Schmid Co., *Hansa,* Hamburg, 1 cs.
Saentis, Inc., *Hansa,* Hamburg, 96 cs.

FILTER PAPER

H. Reeve Angel & Co., Inc., *Ascania,* Southampton, 2 cs.

METAL COVERED PAPER

——, *Paris,* Havre, 1 cs.
K. Pauli Co., *Hansa,* Hamburg, 7 cs.

BASIC PAPER

Globe Shipping Co., *Hansa,* Hamburg, 10 cs.

DECALCOMANIA PAPER

B. F. Drakenfeld & Co., *Britannic,* Liverpool, 30 cs., (duplex).

DECALCOMANIAS

Sellers Transportation Co., *Hansa,* Hamburg, 32 cs.
Phoenix Shipping Co., *Hansa,* Hamburg, 4 cs.

TRANSFER PAPER

Lansen Naeve Corp., *Hansa,* Hamburg, 1 cs.

TISSUE PAPER

Corn Exchange Bank, *Kongo Maru,* Kobe, 7 cs.
Jay Madden Corp., *Mormacsun,* Helsingfors, 51 bbls.
B. F. Drakenfeld & Co., *Britannic,* Liverpool, 7 cs.
Jay Madden Corp., *Scanyork,* Helsingfors, 60 bbls.

GUMMED PAPER

W. A. Foster & Co., *American Importer,* Liverpool, 1 cs.

IMITATION PARCHMENT PAPER

E. Dietzgen & Co., *Hansa,* Hamburg, 8 cs., (grease-proof).

WRITING PAPER

H. W. Robinson & Co., *Hansa,* Hamburg, 3 cs.
Globe Shipping Co., *Hansa,* Hamburg, 10 cs.

TRACING CLOTH

Sternberg & Co., *Britannic,* Liverpool, 4 cs.

PAPER TUBES

——, *Hansa,* Hamburg, 184 cs.

MISCELLANEOUS PAPER

H. Reeve Angel & Co., Inc., *Tokai Maru,* Yokohama, 6 cs.
Remington Rand, Inc., *Tokai Maru,* Yokohama, 2 cs.
Parsons & Whittemore, Inc., *Tunaholm,* Gothenburg, 1 roll.
A. Johnson & Co., *Tunaholm,* Gothenburg, 1 cs.
Remington Rand, Inc., *Anna Maersk,* Kobe, 7 cs.
Japan Paper Co., *Anna Maersk,* Kobe, 62 cs.
De Manduit Paper Corp., *Paris,* Havre, 2 cs.
Keuffel & Esser Co., *Hansa,* Hamburg, 15 rolls, 36 cs.

RAGS, BAGGINGS, ETC.

Castle & Overton, Inc., *Argentino,* Buenos Ayres, 52 bls. old white cottons, 38 bls. old cloths.
Joe Levy & Son, *Orizaba,* Havana, 47 bls. rags.
——, *Uruguayo,* Buenos Ayres, 64 bls. rags.
——, *American Importer,* Liverpool, 45 bls. rags, 15 bls. old twines.
Loumar Textile By Products, Inc., *Volendam,* Rotterdam, 129 bls. bagging.
C. H. Powell Co., *Volendam,* Rotterdam, 79 bls. cotton waste.
Leigh Textile Co., *Volendam,* Rotterdam, 20 bls. cotton waste.
Darmstadt Scott & Courtney, *Scanyork,* Copenhagen, 93 bls. bagging.
——, *American Merchant,* London, 8 bls. rags.
National City Bank, *Alex van Opstal,* Antwerp, 51 bls. jute waste.
Chase National Bank, *Alex van Opstal,* Antwerp, 120 bls. bagging.
J. Cohen & Son Co., Inc., *Britannic,* Liverpool, 16 bls. paper stock.
Chemical National Bank, *Hansa,* Hamburg, 8 bls. rags.

HIDE CUTTINGS

——, *Antonia,* Liverpool, 574 bags.

OLD ROPE

Chase National Bank, *Boston City,* Bristol, 168 coils.

WOOD PULP

Pulp Sales Corp., *Tunaholm,* Helsingfors, 778 bls. sulphite.
Castle & Overton, Inc., *Tunaholm,* Helsingfors, 393 bls. wood pulp.
Perkins Goodwin & Co., *Tunaholm,* Gothenburg, 186 bls. sulphate.

M. Sone, *Scanyork,* Stockholm, 1200 bls. sulphite, 203 tons.
Bulkley Dunton Pulp Co., Inc., *Scanyork,* ———, 750 bls. sulphite, 127 tons.
Pulp Sales Corp., *Scanyork,* Koivisto, 3870 bls. sulphite, 727 tons.
Castle & Overton, Inc., *Hansa,* Hamburg, 525 bls. wood pulp, 105 tons.

WOOD PULP BOARDS

H. Fuchs & Son, *Tunaholm,* Gothenburg, 11 crates.
Jay Madden Corp., *Mormacsun,* Kotka, 89 rolls, 236 pkgs.
H. Fuchs & Son, *Mormacsun,* Kotka, 137 bls.
Jay Madden Corp., *Scanyork,* Koivisto, 25 bls.

ALBANY IMPORTS

WEEK ENDING JANUARY, 14, 1939

Halifax Power & Pulp Co., *Astra,* Sheet Harbor, N. S., 1467 tons ground wood pulp.

PORTLAND IMPORTS

WEEK ENDING JANUARY, 14, 1939

M. Sone, *Mormacsun,* Stockholm, 1800 bls. sulphite, 304 tons.
Price & Pierce, Ltd., *Mormacsun,* Stockholm, 600 bls. unbleached sulphite, 101 tons.
Pulp Sales Corp., *Mormacsun,* Kotka, 1192 bls. sulphite, 238 tons.
Gottesman & Co., Inc., *Tennessee,* Sweden, 4500 bls. wood pulp.
Gottesman & Co., Inc., *Delhi,* Sweden, 6000 bls. wood pulp.

BOSTON IMPORTS

WEEK ENDING JANUARY, 14, 1939

Price & Pierce, Ltd., *Mormacsun,* Stockholm, 1530 bls. bleached sulphite, 259 tons.
Lagerloef Trading Co., *Mormacsun,* Helsingfors, 390 bls. mechanically ground pulp, 79 tons.
Pulp Sales Corp., *Mormacsun,* Helsingfors, 300 bls. sulphite, 54 tons.
Castle & Overton, Inc., *Mormacsun,* Wiborg, 395 bls. wood pulp, 84 tons.
Pulp Sales Corp., *Mormacsun,* Wiborg, 550 bls. sulphite, 110 tons; 994 bls. sulphate, 180 tons.
New England Newspaper Publishing Co., *Mormacsun,* Kotka, 145 rolls newsprint.
Pulp Sales Corp., *Mormacsun,* Kotka, 1995 bls. sulphite, 337 tons; 40 bls. sulphate, 6 tons.
Parsons & Whittemore, Inc., *Wasenwald,* ———, 2075 bls. wood pulp.

PHILADELPHIA IMPORTS

WEEK ENDING JANUARY, 14, 1939

Neidich Process Co., *Tunaholm,* Helsingfors, 20 bbls. tissue paper.
Jay Madden Corp., *Tunaholm,* Kotka, 237 rolls newsprint.
J. W. Hampton Jr., & Co., Inc., *Tunaholm,* Kotka, 280 rolls newsprint.
Public Ledger, Inc., *Tunaholm,* Kotka, 355 rolls newsprint.
Wilkinson Bros., & Co., Inc., *Tunaholm,* Gothenburg, 44 rolls newsprint.
Perkins Goodwin & Co., *Tunaholm,* Gothenburg, 648 bls. sulphate.
Castle & Overton, Inc., *Tunaholm,* Gothenburg, 299 bls. sulphate.
Bulkley Dunton Pulp Co., Inc., *Tunaholm,* ———, 178 bls. sulphate.
Pulp Sales Corp., *Tunaholm,* Viipuri, 2125 bls. wood pulp.
Halifax Power & Pulp Co., *Astra,* Sheet Harbor, N. S., 490 tons wood pulp, (ground).

WILMINGTON IMPORTS

WEEK ENDING JANUARY, 14, 1939

Halifax Power & Pulp Co., *Astra,* Sheet Harbor, N. S., 817 tons ground wood pulp.
Bulkley Dunton Pulp Co., Inc., *Scanyork,* ———, 300 bls. sulphite, 50 tons.
Pulp Sales Corp., *Scanyork,* Helsingfors, 160 bls. ground wood pulp, 32 tons.
Jay Madden Corp., *Scanyork,* Kotka, 135 rolls newsprint, 1142 rolls wood pulp boards.
Castle & Overton, Inc., *Scanyork,* Koivisto, 5694 bls. bleached cellulose, 1138 tons.
Price & Pierce, Ltd., *Schwanheim,* ———, 300 bls. unbleached sulphite, 600 bls. unbleached mechanical pulp.

BALTIMORE IMPORTS

WEEK ENDING JANUARY, 14, 1939

Pulp Sales Corp., *Tunaholm,* Helsingfors, 1300 bls. mechanically ground pulp, 1280 bls. sulphite.
Lagerloef Trading Co., *Tunaholm,* Helsingfors, 520 bls. mechanically ground pulp.
Castle & Overton, Inc., *Tunaholm,* Viipuri, 366 bls. wood pulp.
Pulp Sales Corp., *Tunaholm,* Viipuri, 748 bls. wood pulp, 482 bls. sulphate, 2140 bls. sulphite.
Jay Madden Corp., *Tunaholm,* Kotka, 2088 rolls newsprint.
Scripps Howard Supply Co., Inc., *Tunaholm,* Kotka, 71 rolls newsprint.
Pulp Sales Corp., *Tunaholm,* Kotka, 1050 bls. sulphate.
Perkins Goodwin & Co., *Tunaholm,* Gothenburg, 216 bls bls. sulphite.
Price & Pierce, Ltd., *Scanyork,* Stockholm, 210 bls. sulphite, 35 tons.
Pulp Sales Corp., *Scanyork,* Koivisto, 315 bls. sulphate, 52 tons.
Gottesman & Co., Inc., *Tennessee,* Sweden, 4520 bls. wood pulp.

NEWPORT NEWS IMPORTS

WEEK ENDING JANUARY, 14, 1939

Gottesman & Co., Inc., *Tennessee,* Sweden, 3750 bls. wood pulp.

MOBILE IMPORTS

WEEK ENDING JANUARY, 14, 1939

Royal Manfg. Co., *Kongo Maru,* Kobe, 17 bls. rags.

NEW ORLEANS IMPORTS

WEEK ENDING JANUARY, 14, 1939

E. J. Keller Co., Inc., *Volunteer,* ———, 288 bls. paper stock.

GALVESTON IMPORTS

WEEK ENDING JANUARY 14, 1939

Southern Importers & Exporters, *Kongo Maru,* Yokohama, 3 cs. wall paper.

Henry Junginger Jr. Retires

Henry Junginger, Jr., for the last fifteen years treasurer of The Sabin Robbins Paper Company, Cincinnati, and for the last five years, president and treasurer, has severed his connection as of January 1 and is preparing to take a long and well-earned vacation. During Mr. Junginger's administration the sales volume of the company has been increased by many times and its financial position put on a high plane, through his ability in the handling of the company's affairs.

Mr. Junginger has been identified with the wholesale paper business for forty-five years, having entered the employ of the Graham Paper Company as a boy in 1893. When the late A. L. Whitaker and the late John Church withdrew from the Graham organization to found The Cincinnati Cordage and Paper Company at Cincinnati, young Junginger threw in his lot with them, later going with Whitaker as treasurer of the Whitaker Paper Company, which position he held until the fall of 1923.

The following year he became secretary and treasurer of the Superior Paper Company at Franklin, Ohio, manufacturers of toilet and tissue papers, from which position he was called to the Sabin Robbins organization. Few men now active in the industry have had as long and successful a career as Henry Junginger, especially in the financial end of the business. To an amazing degree he enjoyed the confidence of mills and of bankers, not only within the United States but in Canada and other foreign countries.

Notwithstanding almost half a century of exacting business experience, Mr. Junginger still looks like a young man and his friends are hoping that he will return from his holiday ready to take his place again among the active leaders of the industry.

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4 STAR SERVICE?

★ SCIENTIFIC CONSTRUCTION—Made to exacting specifications by specially trained workers.

★ SPECIAL PAPER—Expertly wound on the most up to date machines.

★ LONG SERVICE—Made to give perfect performance under toughest conditions.

★ UNEXCELLED ECONOMY—Longer lasting, fewer replacements, better service for your money.

Sonoco Returnable and Non-Returnable Spiral Wound Paper Mill Cores are available in several grades, with or without metal caps. Why not write us your specifications—we'll gladly send you quotations and samples.

SPIRAL WOUND RETURNABLE AND NON-RETURNABLE PAPER CORES

SONOCO PRODUCTS COMPANY

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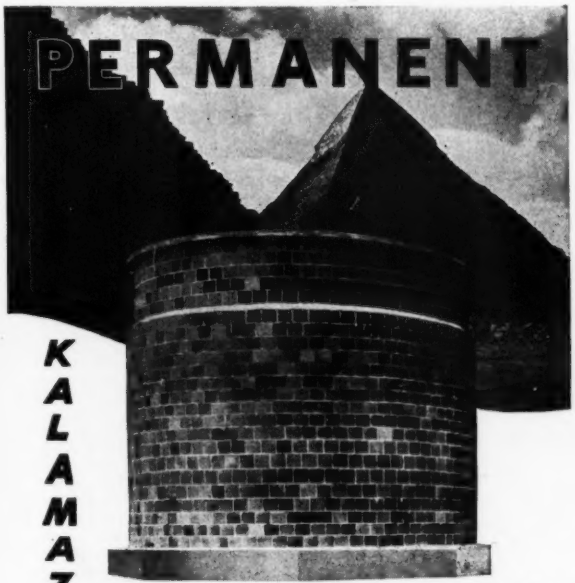

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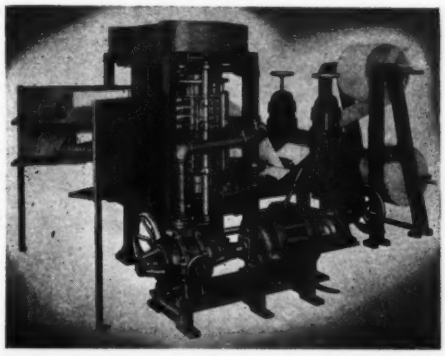
Glazed Tile TANKS

As permanent as reinforced concrete—and cost less. First tanks built show no deterioration today and are as clean as when first erected.

Manufacturers of wood tanks for 60 years.

GLAZED TILE — KALAMAZOO TANK & SILO CO. KALAMAZOO, MICHIGAN — WOOD



THE HIGHEST PRODUCING 2-WEB NAPKIN FOLDER ON THE MARKET

New "VERTIVAC"

ROTARY VERTICAL NAPKIN FOLDER

A machine designed for mass production for making established size napkins. Its capacity is from 1400 to 1500 napkins per minute on 2 webs. Eight napkins are produced in each revolution of the folding rolls. The vacuum system is used for carrying and folding. Made with or without embossing units and printing presses. It has no belts, no mechanical gripping mechanism to wear out, no moving or spring-back tucker blades, and no band knives. Can be equipped to fold ⅛, ⅙, and ¼ fold napkins. Write for complete details on this fast production machine.

PAPER CONVERTING MACHINE CO.

GREEN BAY, WISCONSIN

Manufacturers of paper converting machinery for all purposes.

New York Market Review

Office of the PAPER TRADE JOURNAL,
Wednesday, January 18, 1939.

Reports from many manufacturers' representatives, jobbers, and general paper merchants are encouraging for the current week, although no definite indication for other than a gradual improvement in consumer demand is discernible at this time. The prevailing opinion in the wholesale trade apparently continues moderately optimistic. More confidence in the probable improvement in consumer demand for some grades of paper has been noted in the trade, while other grades are viewed as likely to reflect little improvement until general business reaches a higher level of activity.

As indicated by the index of general business activity, the production of the country continues to rise. The index of general business activity is up from 92.4 to 93.6 per cent for the week ended January 8, 1939, compared with 81.2 per cent for the corresponding week last year. Production of paper in some 195 mills stood at an estimated 66.1 per cent for the week ended January 7, 1939, compared with 59.2 per cent for the like week last year. Production of paperboard for the week ended January 7, 1939 stood at 45.0 per cent, which was the same production ratio reported for the corresponding week last year.

The consumption of newsprint, as indicated by the number of pages issued daily by the newspapers of the country, shows a gradual increase. This uptrend is expected to continue with the prices of newsprint continuing at the prevailing level of from $48 to $50 per ton.

Demand for some grades of paper continues to improve, with reports indicating better sales in the lower grades of sulphite bonds. Some grades of groundwood papers are improved for the week. The demand for book papers continues to be disappointing, due in part to the decline in job and other letterpress printing. Tissue papers are reported in about normal demand for this time of the year. Orders for kraft papers are holding up well, with many mills closed for repairs as is customary at this inventory-taking period.

Mechanical Pulp

The demand for mechanical pulp is reported as rather light for this week. Prices hold firm on all grades of European, Canadian and domestic pulps and as current quotations are conceded to be low, no change in the prevailing price level is expected in the trade in the near future.

Chemical Pulp

No important change in prices or demand has been reported in chemical pulp for this week. Prices continue firm and unchanged, with the trade expecting no change in the market situation until next month, when a pick-up in demand for some grades of pulp is looked for.

Old Rope and Bagging

The old rope market continues relatively quiet, with prices unchanged, despite reports of more or less steady mill buying. A somewhat better feeling is found in the trade and a more active market and a higher price level is expected in the future, but the market situation at this date affords no factual basis for any change in the near future.

The demand for bagging continues quite good in the roofing grades, otherwise no change in the market situation has been reported this week.

Rags

Expectation of an improvement in mill demand prevails in some quarters of the trade and is based upon more inquiries from paper mills received during the current month. Prices on some grades of domestic rags are lower this week, including No. 2 roofing rags. The foreign rag market is inactive and quotations are nominal.

Old Waste Paper

No important change in the market situation of old waste paper has been reported for the week. Prices remain at prevailing levels, with only a few changes in prices reported. Kraft is lower for this week.

Twine

A little improvement in demand has been reported in some grades of twine for this week. Prices remain firm and no important changes in the current market situation is looked for in the immediate future.

Reichhold Appoint Five District Managers

At the January meeting of their board of directors, Reichhold Chemicals, Inc. (formerly Beck, Koller & Company, Inc.) of Detroit, Mich., promoted five of their representatives to managerships of their respective territories. The newly appointed district managers are G. A. (Gus) Olsen, Philadelphia; Wm. J. (Bill) Deeks, Cincinnati; R. H. (Bob) Coerdt, Cleveland; M. W. (Bob) Reece, San Francisco; and F. E. (Frank) Dillon, Los Angeles.

In addition to supervising the sale and distribution of RCI synthetic resins in their respective territories, Messrs. Olsen, Deeks, Coerdt, Reece and Dillon will also handle the sale and distribution of the Lavanburg line of chemical pigments in the districts named.

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All kinds and styles of Felts for all kinds and styles of Papers.

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For Pulp and Paper Mills

Steel, Copper, Brass
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Pulp Washers, Drainer
Bottoms, Filter Plates, etc.

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551 Fifth Avenue, New York City

Miscellaneous Markets

Office of the PAPER TRADE JOURNAL,
Wednesday, January 18, 1939.

ALUM (ACTIVATED)—Prices on activated alum are firm and conform to prevailing market levels. The commercial grades are quoted at $.90 per 100 pounds, in 100 pound multi-wall bags, car lots, f.o.b., works.

BLANC FIXE—Quotations on blanc fixe are unchanged at prevailing market prices. The pulp is quoted at from $42.50 to $45 per ton, in bulk; the powder is offered at from 3½ to 3¾ cents per pound, in barrels, at works.

BLEACHING POWDER—Prices on bleaching powder continue firm and unchanged. Bleaching powder is quoted at from $2 to $2.25 per 100 pounds, in drums, at works.

CASEIN—The demand for casein continues fair for the current week. Standard domestic casein, 20-30 mesh, is quoted at 9 cents per pound; 20-30 mesh, at from 9½ to 10 cents per pound. All prices in bags, car lot quantities.

CAUSTIC SODA—Quotations on caustic soda remain unchanged at prevailing market prices. Solid caustic soda is quoted at from $2.10 to $2.30 per 100 pounds; flake and ground at from $2.50 to $2.70 per 100 pounds, in drums, at works.

CHINA CLAY—Prices of china clay continue steady at prevailing market levels. Imported clay is quoted at from $14.50 to $25 per ton, ship side. Domestic filler clay is quoted at from $6.50 to $12 per ton; coating clay at from $11 to $22 per ton, at mines.

CHLORINE—Quotations on chlorine are unchanged and conform to prevailing market levels. Chlorine is quoted at $2 per 100 pounds, in single-unit tank cars, f.o.b., works.

ROSIN—The demand for rosin is reported improved for the week. "G" gum rosin is quoted at $4.80; "F" wood rosin at $4.30, per 280 pounds, gross weight, in barrels, at Savannah. Seventy per cent gum rosin size is quoted at $2.69 per 100 pounds, f.o.b., shipping point.

SALT CAKE—Quotations on salt cake continue firm and unchanged. Prices range at from $12 to $13.50 per ton; chrome salt cake at from $11 to $12 per ton, f.o.b., shipping point. Imported salt cake is offered at from $14.50 to $15 per ton, Gulf of Atlantic Seaboard, on dock.

SODA ASH—Prices on soda ash are unchanged at prevailing market quotations. Quotations on soda ash in car lots, at works, per 100 pounds, are as follows: in bulk, $.90; in bags, $1.05; and in barrels, $1.35.

STARCH—The demand for corn starch continues good with prices unchanged for the week. Globe pearl is quoted at $2.60 per 100 pounds, in bags. Special paper starch is offered at $2.70 per 100 pounds, in bags. All prices in car lots, f.o.b., Chicago.

SULPHATE OF ALUMINA—Quotations on sulphate of alumina continue unchanged at prevailing market levels. The commercial grades are quoted at $1.15; iron free at $1.30 per 100 pounds, in bags, car lot quantities, f.o.b., works.

SULPHUR—Prices on sulphur continue firm under a good demand and conform to prevailing quotations. Annual contracts are quoted at $16 per long ton, f.o.b., mines. Spot and nearby car lots are quoted at $19 per ton.

TALC—Quotations on talc are unchanged at prevailing market prices. Domestic talc is quoted at from $15 to $18 per ton, Eastern mines. Imported talc is offered at from $25 to $40 per ton, on dock.

Market Quotations

Paper

(Delivered New York)

News, per ton—			
Roll, contract	$50.00	@	—
Sheets	58.00	@	—
Kraft—per cwt.—Delivered Zone A			
No. 1 Northern	$4.75	@	$5.25
Superstandard	4.12½	@	4.62½
Northern Standard Wrapping	4.00	@	—
Standard Wrapping	3.50	@	—
Tissues—Per Ream—Carlots			
White No. 1	.92½	@	—
White No. 1 M. G.	.90	@	—
White No. 1½	.67½	@	—
White No. 2	.60	@	—
Anti-Tarnish M. G.	.75	@	—
Colored	.87½	@	—
Kraft	.75	@	—
Manila	.60	@	—
Unbl. Toilet, 1 M.	3.20	@	—
Bleached Toilet	5.26	@	—
Paper Towels—			
Unbleached	1.80	@	—
Bleached	2.10	@	—
Manila—per cwt.—C. l. f. a.			
No. 1 Jute	8.25	@	9.75
No. 2 Jute	7.50	@	9.00
No. 1 Manila Wrapping, 35 lb.	5.00	@	—
No. 2 Manila Wrapping, 35 lb.	4.75	@	—

Boards, per ton—		
News	27.50	@30.00
Chip	27.50	@30.00
Sgl. Mla. Lt. Chip	42.50	@ —
Jute Lined Chip	42.50	@45.00
White Pat. Coated	55.00	@57.50
Kraft Liners	42.50	@45.00
Binders Boards	71.00	@77.00

The following are representative of distributors' resale prices:

Rag Content Bonds and Ledgers—White, Assorted Items, Delivered in Zone 1:

	Bonds		Ledgers	
100% Rag Ext. No. 1.	$39.10	@$46.00	$40.25	@$47.25
100% Rag	31.05	@ 36.50	32.20	@ 37.75
85% Rag	.....		29.90	@ 35.00
75% Rag	23.60	@ 27.75	24.75	@ 29.00
65% Rag	.....		21.65	@ 26.25
50% Rag	17.55	@ 21.50	18.70	@ 22.75
25% Rag	14.65	@ 17.75	15.80	@ 19.25

Colors at $1.00 cwt. extra.

Sulphite Bonds and Ledgers—White, Assorted Items, Delivered in Zone 1:

	Bonds		Ledgers	
No. 1	$8.60	@$10.50	$9.75	@$12.00
No. 2	7.70	@ 9.50	8.90	@ 10.75
No. 3	6.85	@ 8.25	8.00	@ 9.75
No. 4	6.45	@ 7.75	7.60	@ 9.25

Colors $1.00 cwt. extra.

Free Sheet Book Papers—White, Cased Paper, Delivered in Zone 1:

No. 1 Glossy Coated	$10.80	@	$12.50
No. 2 Glossy Coated	9.25	@	10.75
No. 3 Glossy Coated	8.15	@	9.50
No. 4 Glossy Coated	7.65	@	9.00
No. 1 Antique (watermarked)	7.65	@	9.00
No. 2 Offset	7.00	@	8.25
A Grade E. F.	6.80	@	8.00
A Grade S. & S. C.	7.05	@	8.25
B Grade E. F.	6.25	@	7.50
B Grade S. & S. C.	6.50	@	7.75
C Grade E. F.	6.00	@	7.00
C Grade S. & S. C.	6.25	@	7.25
D Grade E. F.	5.70	@	6.75
D Grade S. & S. C.	5.95	@	7.00

Ivory & India at $.50 cwt. extra.

Mechanical Pulp

(On Dock, Atlantic Ports)

No. 1 Imported—			
Moist	25.00	@	28.00
Dry	25.00	@	28.00
(Delivered)			
No. 1 Domestic and Canadian	29.00	@	33.00

Chemical Pulp

(On Dock, Atlantic, Gulf and West Coast Ports)

Bleached Sulphite (Domestic and Foreign)—			
Prime Bleached Sulphite	2.25	@	2.75
Prime Qualities—			
Easy-Bleaching Sulphite	1.90	@	2.10
Strong Unbleached Sulphite	1.80	@	2.00
(On Dock, Atlantic Ports)			
Kraft Bleached	2.25	@	2.75
Kraft Light & Strong	1.60	@	1.75
Kraft No. 1	1.45	@	1.65
Kraft No. 2	1.40	@	1.45
(F. o. b. Pulp Mill)			
Kraft Domestic	1.25	@	1.75
(Delivered)			
Soda Bleached	2.55	@	—

Add 60 cents per short ton, dock charges for Albany; $2.50 for Lake Ports East and $3.50 for Lake Ports West of Mackinac Straits.

Domestic Rags

New Rags

(Prices to Mill f. o. b. N. Y.)

Shirt Cuttings—			
New White, No. 1.	6.25	@	7.00
Silesias No. 1	4.00	@	4.25
New Unbleached	6.50	@	6.75
Blue Overall	4.75	@	5.00
Fancy	2.00	@	2.15
Washables	1.50	@	1.60
Mixed Khaki Cuttings	3.00	@	3.25
O. D. Khaki Cuttings	4.00		4.25

Old Rags

White, No. 1—			
Repacked	2.90	@	3.15
Miscellaneous	2.10	@	2.25
White, No. 2—			
Repacked	1.50	@	1.60
Miscellaneous	1.25	@	1.40
Thirds and Blues—			
Repacked	1.30	@	1.40
Miscellaneous	1.25	@	1.30
Roofing Rags—			
No. 1	1.10	@	1.20
No. 2	.90	@	1.00
No. 3 (bagging)	.60	@	.70
No. 4	.65	@	.70
No. 5A	.65	@	.70

Foreign Rags

New Rags

New Dark Cuttings	2.25	@	2.40
New Mixed Cuttings	2.00	@	2.20
New Light Silesias	5.50	@	5.75
Light Flannelettes	5.50	@	5.75
New White Cuttings	7.00	@	7.50
New Light Oxford	4.00	@	4.50
New Light Prints	3.00	@	3.25

Old Rags

No. 1 White Linens	7.50	@	8.50
No. 2 White Linens	6.50	@	7.50
No. 3 White Linens	4.50	@	—

West Virginia Pulp and Paper Company

230 Park Ave.
New York

35 East Wacker Drive
Chicago

Public Ledger Building
Philadelphia, Pa.

503 Market St.
San Francisco, Cal.

Manufacturers of

ENGLISH FINISH SUPERCALENDERED
MACHINE FINISHED BOOK
and LITHOGRAPHIC PAPERS

Offset, Envelope, Bond, Writing, Mimeograph, Ledger, Eggshell, Cover and Music Papers, Index Bristol, Post Card and Label Papers

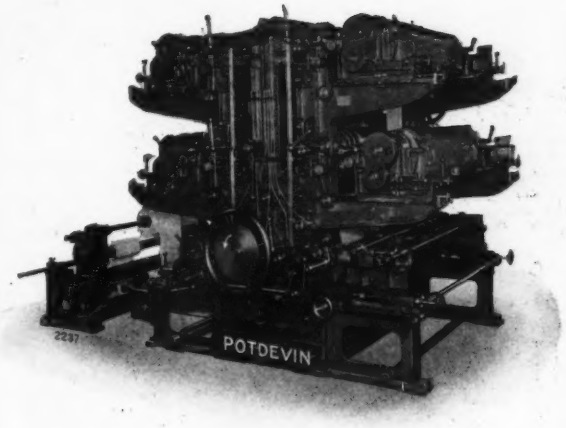
HIGH GRADE COATED BOOK

. . . .

KRAFT WRAPPING AND KRAFT ENVELOPE
KRAFT CYLINDER BOARD
BLEACHED SULPHITE AND SODA PULP
BLEACHED AND UNBLEACHED KRAFT PULP

MILLS:

Mechanicville, New York
Luke, Maryland
Covington, Virginia
Tyrone, Pennsylvania
Williamsburg, Pennsylvania
Cass, West Virginia
Charleston, South Carolina



PMC. 2237 POTDEVIN 6-color pigmented-aniline web press for printing & decorating paper. Final station equipped with rotogravure or lacquering unit.

POTDEVIN

MULTI-COLOR, MULTI-SIZE

PIGMENTED-ANILINE WEB PRINTING PRESSES

also **Oil-ink presses, bag and waxing machines**

POTDEVIN MACHINE CO.
1223 36th Street
Established 1893
Brooklyn, New York
Tel Windsor 6 1700 12

Knox Felts

EXCELSIOR Knox Woolen Co. Mill Camden, Me. FINE & JACKET

HIGH POROSITY

. . . as a characteristic of a paper maker's felt will, not only add to the life of felt, but saves time lost on the machine due to excessive shut downs for washing. Specify

EXCELSIOR FELTS

and minimize this trouble. Made by the Knox Woolen Co., of Camden, Maine, since 1864.

BULKLEY, DUNTON & CO.

295 Madison Ave. New York, N. Y.

CAledonia-8 5260-69

Combine superior finish and exceptional accuracy of both body and journal surfaces with maximum hardness and strength. Made in chilled iron or the extra hard "Farreloy" for every paper mill application. Any diameter from 4" to 72" and any length of face up to 312".

FARREL-BIRMINGHAM COMPANY, INC.
50 State St., Ansonia, Conn.

No. 4 White Linens.	2.25	@	3.25
No. 1 White Cotton.	4.25	@	4.75
No. 2 White Cotton.	3.25	@	3.75
No. 3 White Cotton.	2.50	@	3.00
No. 4 White Cotton.	1.90	@	2.20
Extra Light Prints..	2.00	@	2.40
Ord. Light Prints...	1.75	@	2.15
Med. Light Prints...	1.55	@	1.95
Dutch Blue Cottons.	2.25	@	2.50
French Blue Linens..	3.00	@	—
Checks and Blues...	2.00	@	—
Linsey Garments....	1.90	@	2.00
Dark Cottons.....	1.50	@	1.60
Old Shopperies.....	1.30	@	1.45
New Shopperies.....	1.45	@	1.50
French Blues.....	2.25	@	2.50

Old Rope and Bagging

(Prices to Mill, f. o. b. N. Y.)

Gunny No. 1—			
Foreign	2.10	@	2.20
Domestic	2.00	@	2.10
Wool Tares, light...	1.70	@	1.80
Wool Tares, heavy..	1.80	@	1.90
Bright Bagging.....	1.70	@	1.80
Manila Rope—			
Foreign	2.60	@	2.75
Domestic	2.00	@	3.00
Jute Threads.....	2.75	@	3.00
Sisal Strings.....	1.50	@	1.60
Mixed Strings.....	.60	@	.70

Old Waste Papers

(F. o. b. New York)

Shavings—			
White Envelope Cuttings	2.40	@	2.50
Ordinary Hard White No. 1....	1.90	@	2.00
Soft White No. 1..	1.60	@	1.75
Soft White Extra..	2.25	@	2.40
Flat Stock—			
Stitchless	.80	@	.85
Overissue Mag.....	.70	@	.75
Solid Flat Book...	.60	@	.65
Crumbled No. 1...	.40	@	.45
Ledger Stock White.	1.10	@	1.20
Ledger Stock Colored	.60	@	.70
New B. B. Chips....	.15	@	.20
Manila—			
New Env. Cut.....	1.40	@	1.50
New Cuttings.....	1.00	@	1.20
Old Kraft Machine— Compressed bales..	.60	@	.70
News—			
No. 1 White News	1.25	@	1.30
Strictly Overissue..	.40	@	.45
Strictly Folded....	.30	@	.35
No. 1 Mixed Paper..	.15	@	.20

Twines

(F. o. b. Mill)

(Soft Fiber)

Coarse Polished—			
India	.12¾	@	.14¾
White Hemp.....	.13¾	@	.15¾
Fine Polished—			
Fine India.....	.16	@	.18
Unpolished—			
Box	.09½	@	—
Paper Makers.....	.09½	@	.10½
Tube Rope.....	.10¼	@	.12½
Wall Paper.....	.10¼	@	.12½
Wrapping	—	@	—
Soft Fiber Rope...	.12	@	.14
Cotton	.17	@	.20

(Hard Fiber)

Medium Java.....	.11	@	.17
Mex. Sisal.....	.10	@	.16
Manila	.18	@	.25

PHILADELPHIA

Domestic Rags (New)

(Price to Mill, f. o. b. Phila.)

Shirt Cuttings—			
New White, No. 1.	.06	@	.06¼
New White, No. 2.	.03½	@	.04
Light Silesias.....	.03½	@	.04
Silesias, No. 1....	—	@	.04½
Black Silesias, soft	—	@	.03
New Unbleached..	.05½	@	.06
Washable, No. 1..	.01½	@	.01¾
Blue Overall.....	.04	@	.04½
Cottons—Acording to grades—			
Washable No. 2....	.01	@	.01¼
New Blue.....	.01	@	.01¾
Fancy Percales....	—	@	.02½
New Black Soft....	.03	@	.03½
New Light Seconds	—	@	.04½
New Dark Seconds	.50	@	.75
Khaki Cuttings—			
No. 1 O. D.....	.03	@	.03½
No. 2 Mixed.....	.02	@	.02½
Corduroy	—	@	.02
New Canvas.....	.05	@	.05½
New Black Mixed.	.02½	@	.02¾

Domestic Rags (Old)

White No. 1—			
Repacked	3.00	@	3.25
Miscellaneous	2.50	@	2.75
Thirds and Blues—			
Miscellaneous	1.00	@	1.25
Repacked	1.50	@	1.75
Black Stockings (Export)	3.00	@	3.50
Roofing Stock—			
Foreign No. 1....	—	@	.95
Domestic No. 1....	—	@	.95
Domestic No. 2....	—	@	.85
Roofing Bagging..	—	@	.60

Bagging

(F. o. b. Phila.)

Gunny, No. 1—			
Foreign	1.75	@	2.00
Domestic	1.50	@	1.75
Manila Rope.....	—	@	3.50
Sisal Rope.....	1.50	@	1.75
Mixed Rope.....	.75	@	1.00
Scrap—			
No. 1.....	—	@	1.75
No. 2.....	1.00	@	1.25
Wool Tares, heavy..	3.25	@	3.50
Mixed Strings.....	.75	@	1.00
No. 1 New Light Burlap	2.50	@	3.00
New Burlap Cuttings	1.75	@	2.00

Old Papers

(F. o. b. Phila.)

Shavings—			
No. 1 Hard White.	2.25	@	2.30
No. 2 Hard White.	1.90	@	2.00
No. 1 Soft White..	1.75	@	1.80
No. 2 Soft White..	1.30	@	1.40
No. 1 Mixed.....	.65	@	.75
Solid Ledger Stock..	1.45	@	1.50
Ledger Stock, white.	1.15	@	1.20
Ledger Stock, colored	.75	@	.80
No. 1 Books, heavy..	.60	@	.75
Manila Cuttings.....	1.45	@	1.50
Print Manila.....	.40	@	.45
Container Manila....	.35	@	.40
Kraft Paper.....	.75	@	.80
No. 1 Mixed Paper..	.20	@	.25
Straw Board Chip...	.25	@	.30
Binders Board Chip.	.25	@	.30
Corrugated Board...	.50	@	.55
Overissue News.....	.40	@	.45
Old Newspapers.....	.35	@	.40

BOSTON

Old Papers

(F. o. b. Boston)

Shavings—			
No. 1 Hard White	2.25	@	2.50
No. 1 Soft White..	1.85	@	2.15
No. 2 Mixed.....	.75	@	.80
Solid Ledger Books..	1.30	@	—
Overissue Ledger Stock	1.30	@	1.50
Mixed Ledgers.....	.85	@	.90
No. 1 Books, heavy..	.65	@	.75
No. 1 Books, light...	.65	@	.75
Crumpled Stitchless Book Stock.....	.55	@	.65
Manila Env. Cuttings	1.85	@	2.00
Manila Envelope Cuttings, extra quality.	2.00	@	2.10
No. 1 Old Manila...	.80	@	.90
White Blank News..	1.30	@	1.40
No. 1 Kraft.....	.80	@	.85
Mixed Papers.....	.15	@	—
Print Manila.....	.45	@	.55
Container Manilas...	.27½	@	—
Old Newspapers.....	.25	@	.32½
Paper Wool Strings..	.50	@	.65
Overissue News.....	.45	@	.50
Box Board Chips....	.20	@	.25
Corrugated Boxes....	.25	@	.30
Kraft corrugated boxes	.60	@	.65
Screening Wrappers..	.40	@	.45

Bagging

(F o. b. Boston)

Manila Rope—			
Foreign	2.65	@	2.75
Domestic	2.65	@	2.75
Sisal Rope.....	1.60	@	1.65
Mixed Rope.....	.40	@	.50
Transmission Rope...	1.90	@	2.00
Soft Jute Rope.....	1.80	@	2.00
Jute Carpet Threads.	.75	@	.90
Gunny Bagging—			
Foreign	1.75	@	2.00
Domestic	1.60	@	1.70
Bleachery Burlap....	2.75	@	3.00
Scrap Burlap—			
Foreign	1.60	@	—
Domestic	1.40	@	1.55
Scrap Sisal.....	1.25	@	1.50
Scrap Sisal for Shredding	1.50	@	1.60
Wool Tares, Heavy..	1.60	@	1.65
New Burlap Cuttings	2.00	@	2.25
Aust. Wool Pouches.	2.75	@	3.00
Heavy baling bagging	1.75	@	1.85
Paper Mill Bagging..	1.00	@	1.15
No. 2 Bagging.....	.55	@	.75

Domestic Rags (New)

(F. o. b. Boston)

Shirt Cuttings—			
New Light Prints...	.03¼	@	.03½
New White No. 1...	.06¾	@	.07
New Light Flannelettes	.04¾	@	—
Silesias No. 1.....	.04¾	@	—
New Black Silesias..	.03¾	@	.04
Soft Unbleached.....	6.50	@	7.00
Blue Cheviots.....	.05	@	.05¼
Fancy	.03	@	.03¾
Washable	.02¾	@	.03
Cottons—According to grades—			
Blue Overalls.....	.04¼	@	.05
New Black, soft...	.03¾	@	.04
Khaki Cuttings.....	.03	@	.03½
O. D. Khaki.....	.04	@	—
Corduroy	.02¼	@	.03
New Canvas.....	.06¼	@	.07¼
B. V. D. Cuttings...	.06¾	@	—

Domestic Rags (Old)

(F. o. b. Boston)

Canvas	.04½	@	—
White No. 1—			
Repacked	—	@	2.75
Miscellaneous	2.50	@	2.75
White No. 2—			
Repacked	1.90	@	2.00
Miscellaneous	2.00	@	2.25
Twos and Blues.....	1.75	@	2.00
Old Blue Overalls...	1.50	@	—
Thirds and Blues—			
Repacked	1.37½	@	1.75
Miscellaneous	1.25	@	1.62½
Black Stockings.....	3.90	@	4.00
Roofing Stock—			
No. 1.....	1.00	@	1.10
No. 2.....	.75	@	.85
No. 3.....	.65	@	.70

Foreign Rags

(F. o. b. Boston)

Dark Cottons.....	1.10	@	1.15
Dutch Blues.....	2.65	@	2.75
New Checks and Blues	2.85	@	3.00
Old Fustians.....	2.25	@	2.50
Old Linsey Garments	2.20	@	2.25
New Silesias.....	4.75	@	—

CHICAGO

Old Papers

(F. o. b. Chicago)

Shavings—			
No. 1 White Envelope Cuttings....	1.80	@	1.90
No. 1 Hard White.	1.70	@	1.80
No. 1 Soft White..	1.50	@	—
Ledger & Writings..	.75	@	.80
Solid Books.....	.45	@	.50
Blanks	.90	@	—
Krafts	.45	@	.50
New Kraft Cuts.....	1.10	@	—
Manila Env. Cuts...	Nominal		
Ex. No. 1 Manila...	Nominal		
Print Manila.....	Nominal		
Overissue News.....	.35	@	—
Old Newspapers—			
No. 1 Folded News	.25	@	.30
No. 1 Mixed Paper	.15	@	.20
Roofing Stocks—			
No. 1.....	1.00	@	1.05
No. 2.....	.85	@	—

TORONTO

Paper

Bonds

Direct mill shipment in two-ton lots

No. 1 White	$35.50	@	—
No. 1 Tints	36.50	@	—
No. 2 White	25.50	@	—
No. 2 Tints	26.50	@	—
No. 2 Golden Rod..	27.50	@	—
No. 3 White	21.00	@	—
No. 4 White	15.00	@	—
No. 4 Tints	16.00	@	—
No. 4 Golden Rod..	17.00	@	—

Direct mill shipment in three-ton lots

No. 5 White	$10.50	@	—
No. 5 Tints	11.50	@	—
No. 5 Golden Rod..	12.00	@	—
No. 6 White	9.00	@	—
No. 6 Tints	9.50	@	—
No. 6 Golden Rod..	11.00	@	—
No. 7 White	8.00	@	—
No. 7 Tints	8.50	@	—
No. 7 Golden Rod..	10.00	@	—
Book—			
No. 1 M. F.	$7.00	@	—
No. 2 M. F.	6.50	@	—
No. 3 M. F.	5.25	@	—
No. 1 S. C.	7.25	@	—
No. 2 S. C.	6.75	@	—
No. 3 S. C.	5.75	@	—

Coated Book & Litho

Ton Lots (resale)

No. 1	$12.00	@	—
No. 2	10.25	@	—
No. 3	8.90	@	—
Coated tinted	13.00	@	—
Wrapping—delivered—			
Rag Brown.....	4.85	@	5.25
White Wrap.....	4.00	@	—
"B" Manila.....	4.90	@	6.15
No. 1 Manila.....	5.50	@	6.90
Fiber	5.50	@	6.90
Kraft No. 2.....	5.50	@	6.90

(F. o. b. Cars, Toronto)

News per ton—			
Rolls (contract)...	46.00	@	—
Sheets	54.00	@	—

Pulp

Ground wood.....	29.00	@	—
Unbleached Sulphite.	49.00	@	—
Kraft	50.00	@	—
Soda	54.00	@	—

Old Waste Paper

(In carload lots, f. o. b. Toronto)

Shavings—			
White Env. Cut...	2.25	@	—
Soft White.....	2.15	@	—
White Blk. News..	1.25	@	—
Book and Ledger—			
Flat Magazine and Book Stock (old)	.70	@	—
Light and Crumpled Book Stock.	.60	@	—
Ledgers and Writings	1.00	@	—
Manilas—			
New Manila Cut..	1.35	@	—
Printed Manilas...	.45	@	—
Kraft	.95	@	—
News and Scrap—			
Strictly Overissue..	.50	@	—
Strictly Folded....	.45	@	—
No. 1 Mixed Paper..	.30	@	—

Domestic Rags

(Price to Mills, f. o. b. Toronto)

No. 1 White Shirt Cuttings	.06½	@	.06¾
Fancy Shirt Cuttings	.02¼	@	.02½